California State Journal of Medicine

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MEDICAL SOCIETY OF THE STATE OF CALIFORNIA

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CONTENTS.

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California State Journal of Medicine.

Owned and Published Monthly by the

Medical Society of the State of California

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IMPORTANT NOTICE!

All Scientific Papers submitted for Publication must be Typewritten.

Notify the office promptly of any change of address, in order that mailing list and addresses in the Register may be corrected.

VOL. XV APRIL, 1917 No. 4

COUNTY SOCIETY SECRETARIES:

Many of you have not yet sent to the Secretary's office the list of delegates to the annual meeting. Unless you attend to this within the next week, the space allotted to your County Society will be vacant on the Official Program. To notify the office of the Secretary of the State Society who will be the delegates from your County is part of your job. Besides the Secretary, there are the members of the Committee who have the Program in charge, the Editor, and the printer. All these want your list of delegates. If you have not already done so, please send it now.

IS IT WORTH WHILE?

Authentic figures place the total registration of those entitled to practice the healing art in all its forms in California, at approximately seven thousand. These licentiates are distributed in the following groups, the figures being approximate, but substantially correct:

Regular	(about)	4,658
Homeopathic	(about)	800
Eclectic	(about)	400
Osteopathic	(about)	1,012
Prior to 1907	800	
Since 1907	212	
Drugless Healers	(about)	130
	(About)	7,000

It is stated in Article I, Section 2 of the Constitution and By-Laws of the Medical Society of the State of California that "The purpose of this Society shall be to federate and bring into one compact organization the entire medical profession of the State of California . . ." etc.

The membership of the Society is, at the present writing, about 2,700. There are somewhat more than 4,600 (excluding the few who would be denied admission) physicians eligible to membership in the Society. For some reason or other, your Society has failed to the extent of just 42% in its object, viz: "to bring into one compact organization the entire medical profession of the State of California."

What does membership in this Society mean?

What does it do for each one of you that would be of advantage to those who have not joined its ranks?

Is it worth while?

The State Society representing as it does, the only organized body of "regular" practitioners, is the spokesman of medical thought and opinion before the Legislature. The importance of this fact cannot be overestimated at this particular time, when the law-making body is considering bills which, if passed, will allow the drugless healers to have their own board of examiners; will make difficult experimental research; and will deny to school boards the right to examine pupils, thus allowing epidemic diseases to make headway and get beyond control.

The membership in the Society carries with it insurance against suits for malpractice. This feature will be reviewed at length in a later issue. It needs but to be mentioned here. Its importance is recognized by all of us. It might be added that the cost of this mutual insurance is lower than could be furnished by a commercial carrier operating for profit.

For a sum in addition to the regular dues, about half that charged by the commercial insurance carriers, a fund is maintained for the payment of indemnity in case of a judgment rendered against a participant in this fund. Membership in the Society carries with it the right to become a member of this fund.

These features, organization, representation, insurance, indemnity, to which add the subscription to the Journal, and the scientific activities of the Society, represent what membership in the Society does for each and every one of you.

There is no reason on earth why there should be 1,900 physicians in this State unaffiliated with the Society.

The American Medical Association has begun a campaign to obtain a greater membership in the county societies. You must do your part. Tell those who ought to become members what your Society does for you and that it will do just as much for him.

THE JOURNAL AND ITS PROBLEMS.

We are in receipt of numerous communications from authors of papers to the effect that papers submitted by them have remained so long unpublished, some of them more than a year. Each writer seems to feel that this office has some particular reason for withholding from publicity his particular offering.

The Journal has now sixty-one papers which have been accepted and set up in type. Of these, twenty-two were read at the State Society meeting last April, and thirty-nine before county and other societies. Up to the present time it has been mandatory that the Journal publish all papers read at the State meetings, and customary to publish all papers read at county society meetings. This has caused such an overwhelming influx of material that the printer was compelled to ask us to have no more stuff set up as his supply of type is almost exhausted, and, at the present price of metal he is unable to secure more without an unwarranted outlay of capital.

It is easily seen that if we publish four or five papers in each issue, the sixty-one papers will require a full year to print. Recognizing this condition, the Council has given the Publication Committee the right to reject any papers hereafter submitted, including those read at the meetings of the Society. No paper is ever rejected until it has been carefully considered by at least two members of the Committee. No paper is given preference in any way whatsoever, except in the case of those dealing with material that cannot be delayed. Every paper that is set up in type costs the Journal several dollars for the labor, so that if a paper is withdrawn and the "metal killed," the cost of set-up is a total loss, and we have no surplus.

The Council is about to consider temporarily enlarging the Journal so that the stagnation may be relieved. The result of its deliberations will shortly be communicated to each author. In the meanwhile we ask them to be patient.

THE PROGRAM.

The Committee on Scientific Program has this year introduced an innovation in the publication of abstracts of papers to be read, three months in advance of the date of the meeting. This new feature was accomplished by dint of much hard work and perseverance, but it was worth while.

It is now possible for each and every member to know exactly what phase of any subject the essayist will treat. Discussions will thus necessarily be on a higher plane than ever before, and the time of members will be greatly economized, as they can plan ahead so as to attend those sessions in which subjects of greatest interest to them will be presented.

The new plan is good and should be perpetuated. The gentlemen of the Committee deserve the thanks of the Society. They have earned it.

"THE JOURNAL OF UROLOGY."

Under the editorship of Dr. Hugh Hampton Young, Volume I, Number 1 of this Journal makes its bow to the profession. To quote Dr. Young, in his foreword to the volume, "The title of this publication, 'The Journal of Urology, experimental, medical and surgical,' expresses briefly the aims, hopes and ambitions of the editors. . .

"It is therefore evident that some common meeting place is extremely desirable—some medium in which all types of papers upon the field of common interest may appear—archives of Urology—historical, embryological, anatomical, biochemical, pharmacological, pathological, bacteriological, surgical and medical, experimental and clinical.

"Such is what we hope to accomplish in THE JOURNAL OF UROLOGY, and we bespeak for it the support and active assistance of all who come within the wide scope of its work.

"Realizing that authors may often desire to publish their work also in one of the more special journals, we will be glad to allow this if made simultaneously. Wishing to stimulate investigation, we are fortunate in being able to make use of the generosity of a friend in the shape of a 'Research Fund,' which will be utilized to assist worthy authors of the most meritorious research papers, to be decided by a special editorial committee."

The first number meets the self-imposed conditions in a most admirable manner. The scope of the articles is extremely wide, embracing the fields of tumor cultivation (Burrows, Burns and Suzuki), embryology (Young and E. G. Davis), bacteriology (Thomas and Harrison), biochemistry (Mosenthal and Hiller; D. M. Davis), physiology (Macht), and surgery (Keyes, D. M. Davis and Gorton).

The "Journal of Urology" will have no slight influence upon the advance of our knowledge of the urinary and genital apparatus from all points of view; and we may also look to it for a useful correlation of already existing, but now widely scattered and unusable data.

The "Research Fund" deserves special mention. The "generosity of a friend," which made this feature of the Journal possible will be repaid many times, and with interest, in the products of the labor of the investigators it is destined to assist.

Our congratulations and our wishes that this notable addition to sound medical literature will be handsomely supported.

ON PREPAREDNESS.

This nation is entering—nay, has entered—upon parlous times. What the end will be, or when it will come, no man nor group of men can foretell. From every corner of the land comes word of a feverish activity in every field of social endeavor toward a belated national preparedness. In this movement, the medical profession, true to its ideals, has been no mean participant. All over these United States at strategi-

cally effective points hospital units have been formed. The best appointed hospitals, together with their entire staffs, have enrolled themselves as members of the American Red Cross which, in time of war, becomes automatically a part of the medical service of the Army and of the Navy of the United States. But important as it is, this is not the most important work to be done by the medical profession of our country, and numerous as they are, these men represent a numerically, but an infinitesimally small group of the medical profession as a whole.

Ours is a bountiful land. Because of its natural resources, man obtains his daily bread in greater amount and variety and at a lesser expenditure of "the sweat of his brow" than anywhere else on earth. And because of this abundance we have become the most wasteful people as a nation which has had its being since the passing of the Roman Empire. Where there has been want, except for local accidents, it has been traceable to wastefulness, to bad management or to social injustice.

The nation is about to be tried in that fire which, if unquenched, will cripple our civilization. How great shall be the sacrifices required of us as individuals or as a people, no man can know; but what we do know is that if from the beginning we husband our resources, if we do our best at once because it is our best, and do not wait till we must do it or perish, these sacrifices shall be immeasurably lessened.

On all sides rises a cry of protest against the high cost of living. Congress is importuned to appoint a commission to investigate the causes of this rise in the prices of the necessaries of life. But the public prints which publish these protests, in the same issue print a statement of the very efficient Secretary of Interior to the effect that the housewives of America are wasting annually in their kitchens food to the value of nearly three quarters of a billion of dollars. Mobs go screeching down the streets of New York, storming provision shops and waylaying guests at doors of the greater caravansaries. They demand potatoes when there are none; but when the municipality offers to provide them with rice as a substitute, they scorn the offer. They will not, they say, descend to an Asiatic standard of living.

Here in California with fully a thousand miles of ocean-washed shores and the boundless food resources of the great deep to draw upon despite the fact that the prices of meat are skyrocketing in a way which bids fair soon to be prohibitive, only the influence of the church alone induces man to partake of sea food one day in seven. The excuse given is that the man who works hard must be a beef eater.

Now all this is sheer ignorance and our great duty as a profession must be to war unceasingly on that ignorance. Because, as students of medicine we have studied the subject of food values without prejudice, judging such food staple upon its own merits, as shown by its caloric index, we of the profession know that polished rice has, weight for weight as purchased in the market, four times the food value of potatoes, and that the food value of unpolished rice is nearly one third greater still.

Bulletin No. 468, U. S. Department of Agriculture, 1917, p. 16, in discussing the food value of potatoes and other starchy foods, states, "This, however, is not the case when they (potatoes and rice) are compared in the state in which they appear on the table. When rice is cooked water is added to it, with the result that when it is eaten it is not very different in composition from cooked potatoes; thus a pound of boiled rice and a pound of mashed potatoes would have very much the same total fuel value, a fact which has been intuitively recognized by housekeepers who often use them interchangeably to serve with meats, etc." The reason for this is that water is added to the rice during the process of cooking. Rice as purchased by the housewife contains one-sixth as much water as raw potatoes. Water composes one-eighth of the total weight of uncooked rice, and six-eighths of the total weight of raw potatoes, so were she to purchase both articles at five cents a pound each she would receive, water alone being considered, 1.25 cents worth of food value in the case of potatoes and 4.375 cents worth of food value in the rice. Twenty dollars invested in uncooked rice will feed at least three times the number of persons as would the same sum invested in raw potatoes at the same price. Any difference in price is in favor of the rice.

We recognize that half the human race works harder and longer hours than any of us have to work and that they thrive despite that hard work and long hours upon a diet of which rice is almost the whole constituent. We of the profession know, because the training we have had has inculcated in us the power to think logically, that it is not what he eats, but the absence of hygiene in his way of living which warrants the contention that the Asiatic's is an inferior standard of living.

Again, we of the profession know, because we have studied it in our laboratories, that the flesh of fresh fish properly prepared compares favorably in most ways with that of animals and is not far behind it in caloric values. The waste due to the unedible head, bones, tail and entrails makes it necessary to buy about three times as much fish as round steak.

Finally, we know from the experiments of Fletcher and others that the man who "bolts" his food, who is in too great a hurry to rid himself of the discomfort of an appetite, obtains from what he eats quite 40% less nutritive value than he would did he properly masticate his food. Your slow eater eats less food to more purpose.

And as a first step in this war on wastefulness let us educate those who put their trust in us toward a true appreciation of these two great staples of which the supply is inexhaustible, the price cheap, and the food value well nigh inestimable.

We can best do this by prescribing them as

often as they are indicated as part of the regimen of our sick.

What has always been our duty has now become a patriotic rite.

From report No. 6 of Miscellaneous Series, U. S. Dept. of Agriculture, page 12, shows the nutritive matter contained in rice and other foods as follows:

Rice	86.09%
Corn	82.97%
Wheat	82.54%
Oats	74.02%
Fat Beef	46.03%
Potatoes	23.024%

FOOD VALUES OF RICE AND POTATOES.

The following extracts from reports of the U. S. Dept. of Agriculture give a comparative analysis of rice and potatoes:

	Potatoes	Rice
Water	78.2%	12.4%
Protein	2.2%	7.4%
Fat	.1%	.4%
Starch	18.5%	79.4%
Mineral Matter	1.0%	.4%
	100.0%	100.0%

THE CHARTERING OF MEDICAL TEACHING INSTITUTIONS.

Under the existing laws, any group of individuals desiring to obtain a charter for a "diploma mill" can incorporate and, by merely applying at Sacramento, can become a legally chartered school. No equipment is necessary and the whole organization can be on a paper basis only. It is by this means that various so-called "schools" in this state have been able to organize with impressive "articles of incorporation" and high sounding titles; and with an easily obtained charter, proceed to impose upon the public.

Assembly Bill No. 653, introduced by Mr. Gebhart, is designed to do away with this evil. It provides that a commission consisting of "the secretary of the State Board of Medical Examiners, the Secretary of the State Board of Health, the State Superintendent of Public Instruction, and the President of the University of California, or some one appointed by such president in his place" shall pass upon the sufficiency of the equipment of any medical school or any institution for the teaching of the healing art for which application is made to the Secretary of State for a charter, license or permit. This very excellent bill certainly ought to pass. It would nip in the bud fake teaching institutions and would not work a hardship on legitimate concerns. Had such a law been in force several years ago, we would not now have in California any of the various "drugless," or other freak schools, whose main stock in trade consists of glowing promises to the prospective student. There are numerous "graduates" of such concerns in our midst, and although their "Alma Mater" is a "legally chartered school," the diploma is worthless. These victims make up a considerable number of those trying to do away with the Medical Practice Act at each session of the legislature. Write or wire to Sacramento at once your strong approval of this bill.

MEDICAL LEGISLATION STILL THREATENING.

The State Legislature is still in session and until the latter part of April, when it is expected to adjourn, the law regulating the practice of medicine and surgery is in constant danger of being further weakened by amendments.

Your Journal has endeavored to keep you posted in regard to these matters, and if you have not done so, you are urged to read the editorials covering the subject in the January, February and March issues, and *act at once.*

Up to the present time the following extremely undesirable bills have appeared and all of them, particularly the "drugless" varieties, have strong backing in both houses:Senate Bills Nos. 24, 279, 105, 110 and 760; and Assembly Bills Nos. 1155, 95 and 57.

No doubt various undesirable amendments will be acted upon before the session is over. There is very great danger that innocent looking, but vicious "saving clauses" in the form of amendments will be inserted at the eleventh hour. The vitally important thing now is to let the Governor, Lieutenant Governor, and every individual senator and assemblyman know that the organized regular medical profession *demand that standards be not lowered.* Write or wire to Sacramento at once somthing to that effect. You might also state that the tendency all over the country is to increase educational requirements, and that California must not be the only State to take a backward step. Demand that the barriers that protect the public be strengthened rather than weakened. You might state also that we demand that the public be more fully protected against incompletely educated practitioners of medicine and surgery.

Those various sects and cults clamoring for the privilege of practicing medicine and surgery, and demanding that something be done for their particular (political) organizations, seem to ignore the fact that the sick public has rights which should come first. Is it not time that the public is considered in these matters? Do you recall the time, only two years ago, when the public was given an opportunity to vote on this very question? At that time a vicious "drugless initiative bill" (practically the same as those now being pressed before the legislature) was overwhelmingly defeated by the people. Ought not a reminder of this fact sent to your senator and assemblyman be sufficient warning for them?

The public has the right to demand that only educated, properly trained physicians be provided for them by the State. Therefore, on behalf of the public, we demand that standards be *not lowered.* The regular medical profession is not trying to

limit the number of educated practitioners, but it is trying, and will keep on trying, to have the State make it impossible for the half-educated, "diploma mill" and correspondence school "doctors" to obtain licenses to practice on the helpless sick public.

THE PROSECUTION OF QUACKS.

The right to practice medicine is received under a franchise or a license issued by the State after compliance with regulations imposed under the law. The fulfillment of the legal requirements gives the legal right under the protection of the law to practice.

It can therefore be easily understood that with the granting of this privilege or right by the state that it becomes necessary to prohibit those who have not such legal right or privilege from such practice and hence the necessity under all administrative boards having jurisdiction over licensure in medicine to maintain an energetic department to prosecute violators of the law.

The public has never been sufficiently educated upon the absolute necessity of requiring at least reasonably high educational qualifications for the practice of medicine and the new fads and fancies which obtain a hold upon the public from time to time makes it extremely necessary to conduct the prosecuting department with the force and energy that will result in success, and still with that diplomacy that will protect the interest of medicine from the public who have not a true realization of the seriousness of practice by incompetence. The continuous criticism leveled at the prosecutor in the medical practice cases is the allegation that the medical fraternity does not within its own ranks protect the public from quackery. It is a source of great satisfaction that it can be justifiably stated that the present Board of Medical Examiners in this State is pointed to as a model for other states to follow from the standpoint of clearing up not only the unlicensed but the licensed quack. It can be stated as a fact that California did not possess more charlatans in the medical profession than any other state and still there has been a discontinuance of business of practically the entire venereal advertising specialists in whose ranks may be found the best exemplars of crookedness in the practice of medicine.

The number of convictions obtained by the Legal department of the present Board of Medical Examiners and the list of closed museums of anatomy is sufficient proof of the necessity of a Legal department that will attack crookedness not only of the unlicensed but of those who have been favored and privileged by the State. The following list includes the most conspicuous and better known violators of the Medical Practice Act, who have been forced to cease their pernicious activities.

California Licentiates connected with Medical Institutions convicted of misuse of United States Mail, 1915-1916: Homer C. Edwards, H. Gray Martin, I. C. Gobar, R. J. O'Connell, C. M. Scott, E. J. Rice, G. M. Freeman, Sr., Donald Harris, G. M. Freeman, Jr., Chas. K. Holsman.

Cases pending against California Licentiates for misuse of United States mail: Henry Giles, Ambrose C. Sims, Conrad Czarra, C. N. Hopkins.

Convictions against Non Licentiates connected with Medical Institutions in California, for misuse of United States mail, 1915-1916: Leo. K. Chinn, J. V. Ryle, C. A. Baxter, J. T. Burns, Arthur Penn, Paul Oesting.

Certificates recently revoked for unprofessional conduct: S. R. Chamley, A. L. Hunt, Calvin C. Case, R. S. Lanterman.

Certificates recently suspended for unprofessional conduct: Silas Austin, John C. Suckow, S. G. Edwards, Ray Millsap, J. K. Moradian.

GERMAN SALVARSAN AND THE AMERICAN PRODUCT ARSENOBENZOL.

Some months ago when the German salvarsan could not be had, the Department of Dermatological Research of Philadelphia (Dr. J. F. Schamberg, Director), produced arsenobenzol, a product chemically and therapeutically similar to salvarsan. This was done with the permission of the German agents and when salvarsan again became available arsenobenzol had to be withdrawn from the market. The salvarsan produced during the past few months seems to cause unusually severe reactions, according to published reports in various centers, and there are indications that the supply may again fail. Should it be possible again to have arsenobenzol it will be most welcome, for reports from authorities all over the United States based on thousands of observations, were unanimous in their praise of arsenobenzol, which proved to be just as safe and just as efficient as salvarsan.

Original Articles

STUDENTS' HEALTH INSURANCE AT THE UNIVERSITY OF CALIFORNIA.

ROBERT T. LEGGE, M. D., University of California, Berkeley, California.

Throughout the broad expanse of our country, whether it be in educational activities or industrial life, a wave of social improvement has set in, whereby a demand for health conservation has been recognized. The evolution has been very rapid; so rapid indeed that in the past decade we note medical inspection of schools, health supervision of employees, workingmen's compensation acts, etc., culminating in a legislative demand for a universal system for health insurance. It is one of the most significant problems that confronts American civilization today. The academician, the sociologist, the labor organizations, the medical profession, and necessarily the politicians, are now laboriously endeavoring to develop a system that will be satisfactory, and practical for society. The egotist may shut his eyes and delude himself with the notion that health insurance is a dream. He has only to open them to behold the handwriting on the wall which will inform him of its realization in the very near future.

Health insurance when instituted in a community provides each individual with the best professional care in the event of illness and furnishes a definite stipend for the support of dependents during the period of disability. Its effect will be to greatly improve the medical profession as a whole, as better doctors will be demanded, trained not only in curative medicine, but in the broader field of preventive medicine.

As in the case of the workingmen's compensation act, the medical profession will not necessarily suffer, for the class that this insurance act serves, at the present time, is the class that receives a wage of less than $1,200.00 per year,—a class that can pay only the minimum medical fees, so that it greatly benefits both workingman and physician by insuring for the workingman the best medical care, and for the physician a proper and assured remuneration for his service. The service will create a greater demand for professional advice, and consequent enlargement of the field of work of the physician. Its development will deal a fatal blow to the illegal practitioner and those cults which will be unable to receive recognition.

The health insurance system as it is practiced at the University of California represents a constructive effort, and suggests a plan that with some modification and a co-operative effort may be applicable to the community. The system is being very successfully and satisfactorily operated in many mining, lumbering, or other industrial towns where it is compulsory, and can be controlled by qualified medical men, engaged by the industry. The army and navy perform a like service with selected men.

The economic problem to be solved for this larger field contains many smaller problems which must be disposed of along with its ultimate development, such as the question of its execution without jeopardizing the livelihood of a number of the medical profession. In other words, that all may be able to participate in administering to the demands of the people and in receiving the proper compensation for that service.

If qualified scientific medical men were commissioned and salaried to minister to the demands of the people, as administered for example by the U. S. Public Health Service, or if the system adopted by industrial towns should be adopted in full for the whole public service, the problem would solve itself quite simply and satisfactorily. The difficulty of allaying the fears of the medical profession is not the least of the evils to be overcome. They will raise all sorts of objections, such as the difficulty of the younger members acquiring practice, the cutting down of certain privileged remunerative fees, etc., but they will have to adjust themselves to the new order of things, and will find when it is accomplished how good it is.

California has an authorized commission to investigate the subject of health insurance. It is before the American Medical Association, and other state legislatures, employers and labor organizations. The medical profession in this country must co-operate, and be prepared to incorporate in the proposed law features that will be of vital interest to them, and must then work in harmony to support the measure. If they do not do so it will be to their regret, as proved in the case of the English profession after the passage of the Lloyd George act. Personally, I believe in health insurance, and am satisfied that though at first some difficulties will naturally arise, they will in due time be adjusted and modified to the development of a model federal act.

Some ten years ago, my predecessor, the late Dr. George F. Reinhadt, while a member of the faculty of the University of California, conceived the idea that it was necessary to improve the health and efficiency of the student body. His experience in the department of physical education proved to him that preventive medicine was the only rational means of accomplishing the end result. The "stitch in time" method necessitated a place where it could be applied; where students could visit and be scientifically treated before a more serious condition developed. As a result of this need, the infirmary was instituted upon the campus. This was approved by the President as well as the student body. True, the beginning was small, but by devotion and careful observation, the system was gradually perfected so that it now represents the best type of University health insurance in this country.

It is needless to remark that the idea was opposed by a number of members of the medical profession living in the community. They considered that it was unethical—that it was contract prac-

tice; and I have been told that the founder was about to face charges of unprofessional conduct. Some of the ultra-conservative members in the faculty, it has been stated, criticized the measure as well, with the idea that it was not academic. They could not appreciate the educational value of socialized medicine in improving the efficiency of the student body. The carrying out of these preventive measures has developed conscientious medical care for less money and has resulted in better attendance, fewer infections, and altogether a healthier group of men and women than can be found anywhere. And now all the members of the teaching staff will welcome the day when the system may be enlarged and extended to include themselves as participants in its privileges and benefits.

What changes of attitude take place with the development of social ideas, especially when the people become intelligently aware of measures that meet their needs!

The health insurance plan at the University is financed by a compulsory fee of $3.00 a semester which each student pays at the semi-annual registration period. The board of regents supplied the present building which is a remodelled residence. Annexes and other additions to the building, with equipment, furnishing and supplies, have been purchased from time to time with surplus receipts and donations.

As the attendance increases yearly, with a consequent increase of funds the staff automatically increases in number. The staff is composed mostly of half time men and women who possess ability in special work in medicine and are actuated by the common desire to give their best services to the student body. Several members of the staff are associated with the department of hygiene, combining qualifications which make them unique as teachers of preventive medicine. It is the primary purpose of the staff, through educational means to teach the students how to live and thereby eliminate disease by every available measure.

To accomplish this end, such means have been carried out as compulsory vaccination, control of communicable diseases, incorporation of sanitary measures about the campus to lessen the liability of infection, co-operation with the physical education and military departments, and the compulsory courses in personal and community hygiene which all first year men and women receive. All entrants are required to pass a thorough physical examination which includes the services of a dentist and oculist at the time, besides immunization from smallpox. Only students who are found to have an actively infectious or mental disease are rejected (about 1/5 of 1%). Other physical defects are discovered, treated and corrected by curative measures. The sub-standard or physically inefficient student is advised to carry less work and is constantly under the observation of the proper authorities.

Better to grasp the idea of this system, a concise description of the infirmary is necessary. There is a dispensary department where a daily clinic is held by the members of the staff at stated hours for the men and women. It comprises a commodious waiting room, administrative office, four private doctors' offices, four treatment rooms, X-ray and clinical laboratories, pharmacy, surgery, oculist's and dentist's offices.

For the house-patients the infirmary has forty beds which are in private rooms and wards. The private rooms are sixteen in number and there are two large wards with a capacity of eight beds each. Some private rooms are furnished with two and three beds. Students are all cared for in exactly the same manner, there being no special privileges, no distinction as to race, color or social or commercial standing. If a student requires segregation, it is accomplished at the discretion of the physician. This constitutes a lesson in Democracy which is unique, and is a living demonstration of what mutual understanding and sympathy, which possesses no suggestion of charity, can accomplish in other institutions,—a lesson, for example, for advocates of community sanitariums for tubercular patients, etc. In 1915, the number of bed-patients was 672. 121 of these students were sick in bed as house patients more than once during the year, the average stay being 4.9 days, and the average number of patients per day was 11.8. The largest number of patients at one time was 24.

The number of students who received advice, treatments, etc., during the year 1915-16 was 4,516 or 71% of the combined enrollment of 6,286. To the uninformed it might appear that this large percentage of cases would indicate unusual morbidity, but as a matter of fact the purpose is to encourage early advice for incipient conditions, thereby avoiding graver complications and developments,—the practical application of the "stitch in time." The average number of daily dispensary cases were 126.3, with an average number of treatments per individual patient of 7.8.

The equipment provides the various features that are necessary for a first-class hospital, such as an X-ray laboratory, operating and sterilizing room, and splendid cuisine where the best foods are supplied and prepared, open air desks for the treatment of anaemic and pulmonary cases, a solarium for convalescents, waiting-rooms, and numerous baths and showers.

The estimate of costs for operating the infirmary was based on dividing the gross costs, which include salaries, the maintenance of dispensary and house service, by the number of beds (40), which gives an estimated cost of $2.57 per bed per day.

At the present time a minimum fee is charged for surgical services, which will be gradually lessened and finally abolished altogether. As the State does not provide in its budget funds for the infirmary, it was with these fees and donations that new additions and equipment were purchased.

The number of anaesthetics administered in 1915-16 were 109. There were 262 surgical patients of various kinds, upon whom were performed, including major and minor cases, 151 operations. X-ray examinations totaled for the

year 147 plates, and over 1,625 laboratory reports were made, which included blood counts, cultures, analysis of secretions, etc.

As all students who matriculate are compelled to have a thorough physical examination, it enables us to inform them correctly as to their abilities for physical exercises, classroom-work, college sports, etc. Numerous defects, focal infections, and occasionally graver conditions which might also jeopardize the health of others, and be a menace to the community are detected and treated. Often students are relieved of imaginary diseases. In 1915 we found that 64% of the freshmen had errors of refraction, and our oculist wrote 700 prescriptions for proper glasses. The dental examination revealed that only 82 men and 56 women out of the whole 1513 entrant enrollment had normal teeth. Numerous other illustrations could be cited, such as postural defects, diseased tonsils, chest-diseases, flat feet, etc., etc. Enough has been said for the argument for compulsory medical examinations.

These entrants must have a satisfactory scar to show that they are properly immunized against smallpox, or submit to vaccination. This is a State law. Since 1901, when this law was established, there have been no cases of smallpox among the students. In 1915-16 there were 473 cowpox vaccinations. Typhoid inoculation is not a compulsory measure. However, 273 students voluntarily received the protection against typhoid infection.

Certainly safeguarding the health of the students has been achieved through all these agents. The University provides, through its department of hygiene, compulsory lecture courses in which the truths of preventive medicine, personal and community hygiene are taught, and the superstitions, vagaries of medicine, quackery, and other frauds are shattered and disclosed. All will concede this course to be of inestimable educational value.

A word as to the management of curative medicine as it is practiced at the infirmary: Here is a representative staff of medical men and women who have all a special training in their profession. Men and women who work in harmony, who are in sympathy with this health insurance movement, and who can contribute organized and economical medical service. By careful study of cases, consultation, and assistance from the various laboratory workers, a remarkable number of correct diagnoses are made. The same system that is practiced so successfully at the Massachusetts General Hospital under the direction of Dr. Cabot, and which is also being successfully carried out at St. Luke's Hospital in San Francisco. This is better known as group-medicine. The laity as well as the profession realize that only the very rich and the very poor receive the best type of curative treatment. Why then should not socialized medicine, which can be so successfully applied to college students and industrial plants, be applicable to the whole of society?

THE SAN DIEGO DIAGNOSTIC GROUP CLINIC.

(A Preliminary Report.)

ROBERT POLLOCK, M. D., San Diego, Cal.

This clinic, which was opened to the public on Saturday, February 17th, is the initial expression of an earnest desire on the part of a San Diego philanthropist to help the man of modest income ($100.00 a month or less). Mr. E. W. Scripps, the owner of valuable newspaper properties in San Diego and many other American cities, proposes to have this class furnished with careful group diagnosis at a price within the means of the working man, Mr. Scripps paying all necessary deficits. To do this he has furnished and equipped a substantial building in an easily accessible residence neighborhood and placed it, through a board of five trustees, at the disposal of the local medical profession to plan and work out the details of a diagnostic clinic. Its staff, consisting of fifty members representing all of the recognized specialties, has been selected from the ranks of the County Medical Society. Its members serve in groups for a month at a time.

Patients are accepted for diagnosis only and must be referred by a registered physician. They are kept in the clinic for two or three days, or as long as is necessary to complete a diagnosis, when they are referred back to their physician, to whom is sent a composite of the diagnostic findings, and an outline of treatment suggested. Each physician after examining a patient commits his findings and conclusions to writing and these reports are discussed daily by the entire group on service. In this way an earnest endeavor is made to bring to light and correlate the underlying pathology of obscure problems in diagnosis represented in the patients that travel about from one doctor to another without receiving what they most desire. No member of the diagnostic staff is allowed to accept for treatment patients who have been examined by him within ninety days unless so requested by the patient's physician.

In the two weeks that the clinic has been open, twelve cases have been worked out, every one an interesting symptom complex, and the diagnostic group first assuming service is finding the work intensely interesting.

SYMPTOMATOLOGY OF HYPERTHYROIDISM.*

By HENRY H. LISSNER, M. D., Los Angeles, Cal.

It shall not be the purpose of this paper to take up the symptomatology of exophthalmic goitre but to consider the symptomatology of hyperthyroidism, and only speak of goitre and exophthalmus as concomitant symptoms of thyroid intoxication, since in recent years we have come to learn that not every case of so-called exophthalmic goitre showed the goitre and not infrequently the exophthalmus was

* Read before the annual meeting of the California State Medical Society, Fresno, Cal., April 19th, 1916.

absent, indeed it is to be regretted that the disease has often gone unrecognized because of the lack of this symptom, or the lack of a visible protrusion of the thyroid gland.

[1] The overactive thyroid has been studied for the past 125 years by Morgagni, Parry and Elagini, then by Graves in 1835, Basedow in 1858; later Hirsch and Moebius, and more recently by Kocher, Klose, Plummer, the Mayos, Crile, etc. The symptomatology varied between the heart, the nervous system and intestinal toxins, until at the present writing we have the two main theories as expounded by Crile and Plummer, whom Frazier [2] quotes as follows: "Crile's idea is that Graves' disease is not a disease of a single organ or the result of some fleeting cause, but is a disease of the motor mechanism of man, the same mechanism that causes physical action and that expresses the emotions; its origin is in phylogeny, and its excitation is through some stimulatory emotion, intensely or repeatedly given, or some lowering of the threshold of the nerve receptions, thus establishing a pathologic interaction between the brain and the thyroid."

Plummer regards it as a form of thyrotoxicosis in which the toxin, whatever may be its nature, acts directly on the more vital organs, more notably the central nervous and vascular systems, and that the clinical picture is made more complex by the interaction of those organs whose functions have been directly disturbed by the toxins. Barker [3] is of the opinion that the disease is not simply due to an over activity of a hypertrophic normal gland but is the result of an actual perversion of secretion in a gland pathologically altered. Lohman [4] says that Roos and Oswald have shown that thyreoglobulin, which is formed in the cells, is physiologically inactive until it becomes iodized by the blood. The excess of thyroid secretion may be said to produce a general stimulation of the peripheral nerves, and an increase in metabolism causing the breaking down of tissue proteids, especially those of the muscle.

"Hyperthyroidism [5] is peculiarly a condition of the female during the period of greatest reproductive activity." The first evidence of the condition manifests itself at this time, and may continue even after the complete establishment of the menstrual flow. In fact many cases of so-called physiological hyperthyroidism at this period of life, go on to the true pathological state, or remain quiescent for years only to start again under favorable conditions, i. e., pregnancy, severe nerve shock, etc. At this stage the earliest symptom is the tachycardia, a pulse varying from 100 to 160. It is the opinion of some that a pulse of 100 is not sufficient to be classified as a tachycardia, but in given cases where such condition has been constant over a long period of time it is my opinion that it should be classified as such, and where no other pathological basis can be found to explain it a diagnosis of hyperthyroidism must be made even in the absence of exophthalmus and goitre. The heart is usually somewhat dilated, the pulse beats are rather soft, the carotids jumping, there is a general increase in the precordial impulse, and over the entire heart is heard a systolic blowing murmur or hum, which according to Sahli [6] is produced by the increased rapidity of the blood current. In the more advanced cases gallop rhythm and intensified heart beat are caused by stimulated cardiac action. Finally there develop pronounced myocardial degenerative changes with arrythmia. The blood pressure varies between 120 to 130. The blood shows nothing of diagnostic importance.

Next to the heart, the nervous system is most frequently affected. Here again the earliest indications are met with and not infrequently a tachycardia, occurring in an individual who is showing the nervous symptoms of hyperthyroidism, is put down as a "nervous heart" and the cause is again overlooked. Bearing out this idea several papers have recently appeared which bring out the vagotonic and sympatheticotonic phenomena of Graves' disease. Barker [3] quotes Eppinger and Hess, C. Von Noorden Jr., Barker and Sladen and others, and is of the opinion that most cases show mixed symptoms; especially those with marked nervous and mental disturbances. Tremor is the most frequently discussed nervous symptom, and while it is not always present in the earliest cases in children, according to Pfaundler & Schlossman [7] pseudochorea, as well as genuine chorea are often observed in the beginning but they disappear long before its termination. There are, however, certain other early symptoms of nervous or psychical origin which are most important and must be seriously considered since they are frequently put down as neuresthenic or even hysterical manifestations. Emotional instability, loss of memory, troublesome blushing, sweating, vertigo, melancholia, unusual happiness, in a word a lack of mental poise coupled with mental fatigue, characterizes some of the earlier nervous symptoms; in the later stages the patient's nervous condition may border on insanity. Insomnia though present is not constant except in advanced cases.

Goitre is absent in about 20% of the cases. It is of great interest to note how frequently the symptoms may be out of all proportion to the size of the struma. A very small and barely palpable tumor may cause the most profound symptoms, and vice versa. The goitre may light up suddenly, secondary to other infections, particularly about the mouth or throat according to Jameson [8] and bring on an acute attack with exacerbation of all the symtpoms. One sign of diagnostic importance is the presence of a bruit and thrill radiating down from the apex of the gland, all over the goitre. It must be distinguished from that of aortic disease. The symptoms will vary with the pathology of the gland, and I refer to the studies of Plummer and others of the Mayo clinic for more detailed illustration.

The eye symptoms of the goitre vary from none at all to pronounced exophthalmus. In the more advanced cases they are of course not difficult to

recognize. Von Graefe's, Moebius', Stellwag's and Dalrymple's signs may be elicited but are not constant. The most important is the exophthalmus, and various ideas are advanced as to its causation. Some of them are: that it is due to a weakness of the eye muscles; that a venous enlargement pushes the eyeball forward; that in marked cases there is an increase of retrobulbar fat, but none of these has been accepted above the others.

Loss of weight is in some instances present in the early course of the disease, and if taken with the symptom of tachycardia was usually considered to be more significant of tuberculosis. However, we are now more familiar with the varied types of excessive thyroid secretion and by careful observation soon place these cases in their proper class. This profound loss of weight is due to the loss of fat and albumen from the ever-present metabolic increase, as demonstrated by Magnes Levy [7] (by instituting exact determinations of the respiratory gas changes). At the same time the gastro-intestinal digestion is undisturbed unless there are attacks of serous diarrhoea. Not infrequently there is an increase of appetite, also increased flow of saliva, and in early cases the bowels may move more than once daily.

Farrant [9] has shown that thyroids obtained postmortem from cases of acute and chronic intestinal obstruction have revealed no signs of hyperplasia, and concludes that there is no evidence to show that products of intestinal putrefaction have any action on the thyroid.

There still remains for our consideration an enormous group of symptoms directly or indirectly referable to hyperthyroidism, but lack of time prevents more than a casual mention of them. Muscular weakness is one of the early symptoms; then there are the skin changes, i. e., pigmentation, decrease in galvanic resistance (Vigouroux and Charcot) and sensations of heat; leukoplakia, alopecia, amenorrhœa, dysmenorrhœa, polyuria, albumenuria, alimentary glycosuria, emaciation and cachexia, while occurring in cases of moderate severity and advanced cases they are not characteristic symptoms.

In conclusion it must be evident from the foregoing limited discussion that the usual so-called cardinal symptoms of hyperthyroidism, i. e., tachycardia, exophthalmus and goitre, are not constantly present. Any two of them may be absent, and it is only by constantly bearing in mind the frequency of the early and often insidious onset of the condition at puberty, and by careful observation of the sometimes transitory character of the leading symptoms that we will increase our diagnostic acumen.

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TREATMENT OF SYPHILIS.

By GRANVILLE MAC GOWAN, M. D., Los Angeles.

(Concluded from Page 75, March Journal.)

Mark: "At present, I am using for the treatment of syphilis, salvarsan intramuscularly in the lumbar region as an initial treatment. This salvarsan is prepared in the following manner: The salvarsan is poured into a small salt mouth bottle containing glass beads. Just sufficient warm sterile water, distilled, is poured into the bottle to dissolve the salvarsan. To this is added two or three drops of a 1% alcoholic solution of phenolphthalein as an indicator. Following this a freshly prepared sterile 4% solution of sodium hydrate is added, drop by drop, and the contents shaken until the preparation is a faint salmon pink. It will be found that this will make in amount about eight to ten c.c. This is injected in the lumbar region, in the muscles on each side in divided doses. This whole procedure is preceded by the injection, one-half hour previously, of one-fourth grain morphin and 1/150 of atropin. It is practically painless. This is usually done in the hospital, the patient leaving the following morning and returning to work. In about one week, we begin intramuscular injections of mercury salicylate, or inunctions of mercury. Inunctions are given daily for six days, followed by a Turkish bath on the seventh day without inunction. Intramuscular injections of salicylate are given where they do not cause too much pain and are not objected to by the patient. In six months to one year later we give other salvarsan mercurial courses with tonics. They are continued for about two and one-half years, at the end of which time a rest is taken for six months and a Wassermann is taken; if negative, six months more are allowed to elapse, then a second Wassermann is taken. If still negative, the patient is requested to take twice a year about six weeks of mixed treatment, purely as a precautionary measure."

Chassignac: "You know it should not be the disease, or the cause of the disease you treat, but the patient; hence there can never be a routine. The new drugs I consider not tried long enough to know of the permanence of their effect. Salvarsan I use to control the symptoms, but prefer to use the old and new forms in the treatment, in combination, so as to give the benefit of all we know to the patient. The mercury, I prefer to administer in the form of soluble salts by the needle, or by inunctions. The salvarsan, I prefer to give by intramuscular injections. Until we have accumulated sufficient proof that the salvarsan can do what mercury can do and in a shorter time, I intend to continue advocating the three years' treatment. I am guided by the Wassermann, but do not consider it infallible in its indications, nor

that it replaces clinical observations or judgment based on experience."

Gradwohl: "I believe in the combined salvarsan and mercury treatment. I give at least six doses of 0.4 grammes at intervals of ten days, followed by six intramuscular injections of salicylate at weekly intervals. That brings us up to the 110th day of the treatment, then a Wassermann is made. If negative, I give iron tonics for two weeks and then repeat the course, substituting twenty-four rubs for the injection of salicylate, of course avoiding salivation, which brings us to the 200th day of the treatment, when another Wassermann is made. If negative, another course of tonics for thirty days, and then a Wassermann. This is followed with twenty-four more rubs in a series of six, and tonics for twenty days. If the Wassermann continues negative four salvarsan injections at intervals of three weeks, then a rest for thirty days. This is the 476th day; then a series of inunctions, twenty-four in all, in groups of six. This treatment is pursued for three or four years with salicylate injections and inunctions of mercury and Wassermann reactions at periodic intervals. After three years, with a succession of repeated negative Wassermanns, and with spinal fluid test negative, after provocative Wassermann, I place the patient under observation for two years with treatment four months in the year."

O'Crowley: "In primary syphilis, as soon as the diagnosis is clinched, either by the microscope, or by a Wassermann, I give a full dose of neosalvarsan intravenously weekly, for four to six weeks and follow that weekly for a year with intramuscular injections of salicylate of mercury, the dose being graduated according to the susceptibility of the patient to mercurials, and according to his resistance. The injections are sometimes continued for eighteen months. After an interval of six weeks, following the last injection, a Wassermann is made, and if negative, another is taken every three months for one or two years. If they are all negative, an examination of the spinal fluid is made, if the patient will consent, and if this is negative I consider him cured. If, however, the Wassermann should show two plus or over, I advise four intravenous injections of neosalvarsan weekly, followed by intramuscular injections of mercury weekly for several months, then a rest for six weeks before a Wassermann, which should be negative. If my patient has never had generalized symptoms, I do not think it is necessary to use the iodides. With this method, I get good and bad results, and feel that the time has come to standardize the treatment of syphilis, for I do not feel justified in speaking too enthusiastically of my present ideas and system."

Lyon: "I believe salvarsan is a specific poison to the spirochete, the efficiency of which is in direct ratio to the age of the infection, but I have never employed it as the only remedy in the treatment of syphilis. I believe it is impossible to cure syphilis with this drug, unless the diagnosis be made before the lymphatics become involved. As soon as the diagnosis is made the patient is treated by combined mercury and salvarsan, receiving three or four injections of .4 salvarsan weekly, and following this course, ten or twelve injections of grey oil or salicylate, then a rest for a month during which time tonics are given. Then the treatment is repeated and the patient allowed two months' rest, during which tonics are given again. At the beginning of the second year, twelve injections of mercury without the salvarsan are given before a rest for three months with tonics and iodides, followed by another course of mercury injections, with a six months' rest and then a repetition of the injections. The results of this treatment in my hands have been altogether favorable. Syphilitic patients must continue, as in the past, to remain under observation for years. The Wassermann reactions during the treatment are variable and often contradictory to the symptoms. In so-called tertiary cases, I have often seen active lesions with a negative Wassermann found positive, a few months later without any treatment. The Wassermann is absolutely no criterion as to the extent of the cure of a still active disease."

Charlton (of Indianapolis): "In acute cases, one full dose of salvarsan intravenously and then twelve to fifteen intramuscular injections of calomel or grey oil at weekly intervals, followed by another full dose of salvarsan. This standard is purely arbitrary, arrived at by observation. Since using it, I have not had a single recurrence, either clinically or by the Wassermann. Where the syphilis has become generalized this is not sufficient in quite a percentage of the cases. Cases of tabes, paresis and old profound visceral syphilis I would not include as suitable for the above routine. But, I believe that the above short course will absolutely and permanently cure the majority of early cases.

McDonagh: "Every one has agreed that if syphilis is to be cured, diagnosis of the initial lesion at the earliest possible moment is essential. I feel very strongly that the best diagnosis is a clinical and not a Wassermann one. Excision of the primary sore to be practiced when possible. If this cannot be done, it should be cauterized. Following this, at intervals of four days, I give seven injections of neosalvarsan, commencing with .04 and ending with .75. A week after the seventh injection, an intramuscular injection of grey oil followed by seven others. This is to be followed by eight intramuscular injections of grey oil, at intervals of a week, then iodides for three weeks, followed by a rest of five weeks, and then a repetition of the course. Mercury and the iodides and the rest twice repeated. If the disease has become generalized, if possible an examination of the cerebro-spinal fluid. If the fluid is normal, seven injections of neosalvarsan at intervals of from four to seven days. If the fluid is pathological, nine to eleven injections, and if still positive after this, as many intradural injections of salvarsanized serum as is necessary to render the fluid normal, then six courses of the mercury and iodide treatment spread out over two years. The injections of neosalvarsan commence with 0.45 and end with 0.90. Latent stage—when I placed reliance upon the Wassermann reaction, treating those who gave

a positive reaction, and leaving those who gave a negative reaction, the course was not clear; but now, I no longer attach the importance to this reaction which I once did, and I have to alter my routine. I now examine the cerebro-spinal fluid and if this is normal, however positive the blood may be, I do not advise any treatment. If the cerebro-spinal fluid is positive, whether the blood is positive or negative, I give as many injections of salvarsanized serum as is necessary to render the fluid normal again, and supplement by one or two years' treatment of mercury."

It has always seemed to me, from the beginning of my knowledge of syphilis, that its progress could be stayed if vigorous treatment could be commenced before the advent of generalized symptoms. I got this opinion from Auspitz, a brilliant clinician, who, derided by his fellows at the Vienna Clinic, went on excising chancres coming to observation early, and pushing mercury afterwards without waiting for secondary symptoms, because he knew he had by these means, in a few instances, prevented the fastening of this plague for life upon the victim. For more than twenty years I stood almost alone among the teachers of America in advocating the effort to eradicate syphilis, before the advent of general symptoms. To-day, many are with me. The discovery of the fact that the spirochete pallida and its spores are the cause, that they can be detected in the initial sore soon after its advent, and that intravenous injections of salvarsan or neosalvarsan, given early and often, will destroy them in situ and cure the disease, is the cause of the change. Now everybody believes that the patient should be cleared up, before he can infect others.

The time to realize the dream of a positive cure of syphilis is to accomplish it before the disease has become generalized. The average initial lesion is so well marked that a trained clinician cannot go astray in the diagnosis. The spirochete can be found in the vast majority of cases just before, or at the commencement of the induration of the neighboring lymphatic glands. Given a sore that answers the description of a Hunterian chancre, anywhere upon the body surface, with or without the ability to find the spirochete therein, it should be destroyed by excision with the electric cautery, and if no time should be lost in the administration of five to seven injections of salvarsan, or neosalvarsan, in increasing doses, at intervals of four days to a week, a permanent and positive cure will be effected. Enough should be given to overwhelm the parasite but not destroy the patient. There are but two definite contraindications for this treatment. One is renal insufficiency, and the other is acute infections of the respiratory tract. One must not wait for generalization, which certainly is accomplished very frequently while the Wassermann is still negative. After generalization has taken place, when mucous patches are present in the mouth, and the various erythematous, papular, squamous or papulo-pustular lesions have occurred upon the skin, then to me the best method, holding forth the greatest hope of permanent success, lies in the combined treatment of mercury and the arsenical preparations, of which salvarsan is the type. To be effective, however, the arsenical preparations must be used intravenously and used at short intervals; because, if the total dose is a small one, or the interval between the doses is too great, the spirochete and their spores will not all be killed, and those that remain will develop an immunity to the drug. It is futile to give a single dose at any time, in generalized syphilis. We have no way of telling whether the patient will be tolerant to the arsenical preparation primarily, so it is best to commence with a moderate quantity, say 0.4, and gradually raise to the limit on the fourth injection, because in the presence of an energetic action upon the spirochetes, toxins are liberated into the blood which cause unforseen symptoms, and these are most likely to occur on the third day following the second dose. Their dangerous form is that of hemorrhagic encephalitis, which is a symptom of syphilis, and sometimes causes death where no arsenical preparations have been used. But, deaths have occurred sufficiently often, and serious symptoms still more often, on the third day after the second dose of salvarsan or neosalvarsan in syphilitic cases in the stage of early generalization, to make one very cautious at this time. I now give from six to eight injections within five weeks, the number being determined by the effects upon the patient and his general well being. Between these injections the major number of syphilologists to-day give intramuscular injections of insoluble preparations of mercury. I do not think this is necessary, but after the last salvarsan injection, commencing on the second day, I think it is best to give injections of mercury at intervals of from five to seven days for thirty injections, unless adverse symptoms like stomatitis, or interference with nutrition, or painful nodes at the site of injection follow, or seem to follow them; then a rest is given for six weeks and a Wassermann taken. The object of this Wassermann is really more to satisfy the patient that everything is being done for him that can be done, for arbitrarily the mercurial course is then repeated and a rest given for two months, when another Wassermann of the blood is taken, and if this is negative, an interval of three months is allowed without treatment, and if at the end of this time the Wassermann remains negative, an interval of four months is entered upon, when, if the Wassermann of the blood still remains negative, a Wassermann of the spinal fluid is taken, and if both are negative the individual is believed to be cured but must report at intervals of every three months for a Wassermann and a clinical inspection for another year. If there is any difficulty about taking intramuscular injections of mercury by reason of pain or fear, disagreeable nodes, or possible abscesses, then I substitute inunctions, using a preparation called "Hageen," which is cleaner, more convenient and just as effective as mercurial ointment. This is given in courses of six rubs and a day's rest, one month out of every two, for a year.

Now, if at the end of six or eight or ten months, or a year, after the cessation of treatment, the Wassermann of the blood, which has

been negative, appears positive, what shall one do? Enter upon the unceasing and unending course of treatment anew? In the absence of any clinical symptoms, excepting that of the Wassermann, I think not. My experience is, that such a treatment as I have prescribed, carried out in the early period of the general manifestations, would, in all probability prove successful, and that a Wassermann once negative will remain so. But, if in the interval the individual desires to marry, or desires to enter into some relation where it is possible to transmit his disease to others, and requires a positive answer, I advise a provocative injection of salvarsan or neosalvarsan, and then, if his blood Wassermann is found negative, and his spinal fluid answering negative to the phases of Nonne, I should regard him as cured. Clinically, he might be considered cured, even if the blood did show a mildly positive Wassermann, for the reaction does not, in the opinion of many people who are competent to judge, show that one has an active syphilis. It is comparable to the tuberculin reaction which only shows the presence at some time in life, of the disease in the body.

It is in late lesions where the treponema have settled down for life, infiltrating vital organs, with or without definite destruction, as in aortitis, cirrhosis of the liver, myocarditis, pulmonary affections, etc., when unaccompanied by recognizable lesions of present or past affections of the skin, mucous membranes or bones, that the Wassermann reaction is really of most use to the clinician. It helps him clinch the guess he may have made and heads him toward the proper treatment. It does not aid him in telling when they are cured, for in these cases, as in gummatous destruction of bone, muscles, and skin, a clinical cure is the rule following aggressive combined attacks with mercury, arsenical injections, and iodides, but a continuous serological cure almost never occurs, and repeated Wassermanns only serve to disturb the patient, and create in his mind doubt and despair. It is here that the man has to be saved without any definite real hope of destroying the disease. The spirochaetes are too well entrenched to be routed, but they may be disturbed, and the pathological changes they have caused, repaired. In such cases, outside of the domain of syphilis of the nervous system, the opinion I have formed from my reading, and my personal experience, is that a succession of assaults with iodin to break down the citadel, of salvarsan to reach liberated or exposed spirochaetes, and disable or destroy them, followed by mercury to clean up the field, so to speak, will give the best results.

The intervals and manner of conducting this campaign must be individual and necessarily vary with the general health of the particular person to whom it is applied. Tonics, fresh air, good company, the avoidance of too much laboratory testing and an optimistic opinion of the physician also help some in achieving a clinical cure.

The only way a hereditary syphilis can be cured perfectly, is to cure the mother while she is carrying the child, and this can be done with salvarsan and mercury. The majority of these children, born with patent signs of the disease, die early, and thus escape a miserable existence. Up to four years, I think with few exceptions, every one uses the ancient treatment of the abdominal mercurial bandage, or the grey powder internally, and baths of bichloride of mercury. After four years, salvarsan may be administered in proportionate doses, by intravenous injections with the happiest results in producing clinical cures, using the jugular veins. Some have advocated, and put into practice, the use of the superior longitudinal sinus before the closure of the fontanelles. The congenital syphilis of grown people must be treated exactly the same as a late syphilis earned by the victim himself.

Syphilis of the central nervous system: Of late some pathologists have imagined that different strains of spirochaetes cause different manifestations; one strain for symptomatic lesions and one for nervous lesions, etc. There is no proof anywhere of any kind that this is the case. Much attention has been given to nerve syphilis during the past five years, and sufficient experimental work has been done by a few extremely competent, and a mass of rank incompetent, observers, so that we are now in a position to give the approximate worth of the prevailing methods of treatment. Attention should always be given to early meningeal lesions, for, although the majority of these clear up under a non-intensive treatment, as they are exudative, occasionally damage is done which is irreparable, and this can very well be prevented by a few immediate intramuscular injections of mercury, followed by ascending doses of salvarsan, in number, five to eight. In intracranial affections, other than early meningeal lesions, the fashion of the day is to deny the usefulness of any treatment possessing the power to arrest the disease without injecting the remedy directly into the subarachnoid space in the cord, or introducing it into the lateral ventricles where it may circulate with the cerebrospinal lymph with the hope of its reaching, through the foramen of Magendie and the foramina of Luschka, the ventricular cavities, the central canal of the spinal cord, and the perivascular connecting lymph spaces to all of the nerve cells. This theory, for it is a theory, is based upon incomplete experiments which seem to show that the cells of the choroidal plexus are composed of a colloid that will not permit the passage of arsenic or mercury from the blood stream into these lymph spaces though allowing them to pass out. As against this assumption, Homer Swift, who originated the method, says that the cerebrospinal fluid sometimes contains arsenic after intravenous injections of salvarsan. Second, Block and Chaplin state that after three or four intravenous injections of old or neosalvarsan, at short intervals, arsenic can easily be detected in the cerebrospinal fluid. Barbat states that after giving an intravenous injection of salvarsan, it will appear promptly in the spinal fluid if the pressure in the canal is reduced by tapping. The experiments of Benedict, who is not a physician, but a skilled

biological chemist, showed that the maximum amount of salvarsan in 20 c.c.'s of whole blood, forty-five minutes after an intravenous injection of salvarsan, equals .0001. Bond, repeating the experiments in four specimens of spinal fluid taken twenty-four hours after intravenous injections of salvarsan, showed free arsenic up to one-sixth to one-tenth of the concentration in the whole blood. It is not reasonable to suppose that any part of the body can permanently escape receiving any substance which is carried for a considerable time in the blood stream. The resistance in the colloidal filter will be broken down and let it through; so that, in the vast majority of cases of nerve syphilis, there is no necessity for taking the risk of intraspinal injections. It is a matter of common experience that they are painful, that the reactions are often severe, that bladder paralysis may occur, and that this may be permanent, and too frequently, they fail in any way to pay for their trouble and expense. The weight of opinion of neuro-syphilographers at the last meeting of the A. M. A. was strongly against their use. This method should not be used at all in late hemiplegia, degenerative encephalitis, myelitis or paresis. It should be saved entirely for those cases which will not respond to the arsenic compounds of the benzol ring given intravenously, and to mercury. No one is better qualified to speak than Fordyce, who states "the majority of people with abnormal spinal fluid can be influenced by intravenous treatment, but slow." Nonne condemns them without qualification. These remarks apply in a lesser degree to the use of mercurialized serums. It is well to remember that lumbar puncture is not always an innocuous procedure.

Of it Nonne says: "Syphilitics rarely have trouble, but those who are not syphilitic frequently suffer for days and even weeks from headaches, giddiness and nausea. I saw one man who was prevented from attending to his business for nearly six months by these symptoms. Puncture in the consulting-room should be absolutely condemned. The physician may be held legally liable for disagreeable results." Nonne himself has had to pay.

Do not treat early syphilis symptomatically, or syphilis at any stage by prescriptions from a book. It is a spirochetal septicaemia and requires vigorous and prolonged measures to effect a cure.

Drugs: In the treatment, salvarsan, neosalvarsan and kindred arsenical compounds, mercury, preparations containing iodine, and sodium nucleinate, together with excitants of appetite and digestion, need to be considered. Old salvarsan and neosalvarsan require very careful handling. The solution for injection, either intramuscular or intravenous, must always be freshly prepared. Their chemical composition is easily disturbed. The glassware should by preference be Jena glass, the rubber tubes pure rubber, and both should be boiled in distilled water just before they are used in vessels which have been previously rinsed with distilled water. The water for the preparation of the solutions should be freshly distilled; the filter paper should be sterile, and the sodium hydrate solution should be chemically pure. The saline for dilution should be made with sterile chloride of sodium. The arm of the individual should be thoroughly cleansed with soap and water and alcohol, or with tincture of iodine. The salvarsan solutions can be used in much greater concentrations than that advised by the makers, but never, on account of the considerable amount of alkali, approach in concentration the solutions of neosalvarsan. I have now for about two years been dissolving my neosalvarsan powders in from ten to twenty c.c.'s of distilled water, and using an ordinary all-glass syringe to give it with, and have never noticed any ill effects from it. Intramuscular injections I do not give, and I would not advise others to give them, although most excellent physicians, like Marks and Swinbourne and Chassaignac, prefer to use them. Salvarsan solutions should always be filtered before using. For this purpose, some use several layers of plain sterile gauze, but a hardened filter paper is preferable. My experience has satisfied me, that to get the effects desired, the injections must be repeated at very short intervals, and this can be done only intravenously. Neosalvarsan is not quite so powerful as salvarsan, nor is it retained so long and it can be given more frequently. Some of the most expert syphilologists, like Fordyce, prefer to give small doses of this drug every two or three days in preference to any other treatment for syphilitic affections. Sometimes great difficulty is experienced in the late lesions of syphilis in giving salvarsan, when the veins appear prominent, because of a round celled infiltration of the intima, or a radiating phlebitis, the fluid will not flow when the needle is in the vein. I have never yet been able to convince myself that injections of old salvarsan, given at the office without rest, or restraint, of the patient, is altogether safe. I believe that it is best that the patient be in bed for from twelve to twenty-four hours after an intravenous injection of either of these drugs, but to-day many practitioners of standing administer neosalvarsan as a routine in their offices. Intradural injections of salvarsanized serum is an ingenious and fascinating proposition. If given at all, it should be according to the method put forward by Swift and Ellis. Others have sought to improve upon this method, but to the disinterested observer their improvements seem to be without merit. The injections of salvarsan or neosalvarsan solutions directly into the spinal lymph space, or into the lateral ventricles, appears to me to be an insane procedure, the results of which give no possible excuse for their use. If intradural injections are undertaken at all, the administrator must be prepared for trouble, and his patient must also be psychically prepared for the pain and aggravation of symptoms which so frequently follow. A review of the literature leaves me with very grave doubts as to whether intraspinal injections ever are curative. The natural history of the diseases they seem to help, and for which they are administered, shows intervals of apparent freedom from advancing symptomatic troubles, and we have no way of telling whether the good results which have appeared in

a few cases from this method of using salvarsan or neosalvarsan, might not have been due to natural periods of rest in the disease.

A preparation called arsenobenzol, recently introduced into the American market by the Philadelphia Polyclinic, is very highly spoken of, and possesses at present the merit of being relatively cheaper, and that supplies can be obtained. It appears not to have distinct ill effects, and it does cause the symptomatic disappearance of the lesions of syphilis. That its ultimate worth may prove to be, time alone may tell. No doubt other chemical compounds along the lines of these salvarsan preparations will be discovered by chemists outside of Germany, perhaps more satisfactory than the present ones. The war has compelled English and American chemists to take up this line of research, and in order to test the value of their preparations, we must not have a previous judgment, and must be satisfied to experiment with them, just as was done with the original preparations.

Mercury: For hundreds of years, mercury has been rubbed into the skin for syphilis, or swallowed in the form of pills or solutions. Since 1878, when Lewin of Berlin introduced intramuscular and intravenous injections of bichloride of mercury, the attention of the profession has been directed to this method of the administration of the metal. The bichloride, the cyanide and the succinimid are the soluble salts in use to-day. Of the cyanide .5 to 1.5 of a one to one hundred solution may be injected every other day, intravenously, without harm and frequently with much benefit. Of the bichloride, from .0075 can be used twice a week, dissolved in from ten to twenty c.c.'s of freshly distilled water, for from six to eight weeks, intravenously. For intramuscular injections, the insoluble preparations of mercury are almost exclusively used. Calomel is not very popular. There are some practitioners who have learned to use it without danger, but more abscesses have followed its use, and more pain has been caused by it, and salivation more frequently follows, than with any other preparation. I should class it as more potent than either grey oil or salicylate, but also more dangerous, and therefore prefer to leave it out of my practice. Of the preparations of grey oil I prefer the Burroughs & Welcome cream, or Emoseter, an Italian preparation. In spite of the adverse opinion of Nelson and Anderson, I believe the 10% suspension of mercury salicylate is a potent and effective remedy for syphilis used intramuscularly, the ampules of Hynson and Westcott are convenient. The market is full of proprietary preparations, each maker claiming virtues for his particular formula which it may, or may not, possess. Of soluble preparations, enesol is very useful. The patient comes under the influence of the mercury with it very rapidly. Another is the mercurialized serum put up by Mulford. With a very great number of practitioners, nothing has ever taken the place of mercurial inunctions. While admitting their great value, I never use them unless the patient either cannot take the intramuscular injections on account of pain, or on account of inability to appear at regular intervals in the consulting room. A course of inunctions should be thirty.

Where the eruption is scaly or papular upon the palms, and the patient cannot take salvarsan, I know of no method by which such a speedy recovery can be brought about, as by local fumigation. The healing of the chancre is also facilitated by the applications of mercurials to it. It should be cocainized and then cauterized with acid nitrate of mercury, and afterwards dressed with a weak solution, one to one thousand, of bichloride of mercury. When one cannot use the arsenical preparations and has to depend upon mercury, a calomel or ammoniated mercury ointment will very greatly help the cure of its manifestations upon the skin. So also, will baths of bichloride, one to two grams to an ordinary hot bath of 100 liters.

There are conditions under which it is necessary to take mercury internally. It is the least efficacious of all the methods of its administration, and yet it is the one most used. It must be that many cases of syphilis have been cured, clinically at least, in this way. Salivation and gastric disturbances are frequently caused by it. When used, it is best to follow the advice of Fournier and Keyes. I have found tablets of grey powder, tannate of mercury, and the Garnier pill the best preparations for continuous use, but treatment should be omitted several times a year, for a period of six to eight weeks, so as to avoid the chances of mercurialism. Tertiary manifestations, of an infiltrative or ulcerative type, including gummata on the bone, may frequently be made to disappear very rapidly by the local use of a compound plaster of mercury and belladonna. Iodin preparations are invaluable in the later stages, when there is much round celled infiltration. Iodin softens up these deposits and prepares their way for absorption and fixes it so that the mercury or arsenic can come into contact with the spirochaete. There have been no more efficient preparations introduced of recent years than those which we are familiar with: the iodides of potassium and sodium, and sagodin. Nucleinate of soda is highly recommended by Fischer of Prague, and Lane and McDonagh of London, in degenerative encephalitis and syphilitic dementia. It is employed in intramuscular injections of from ten to fifty c.c.'s of from a two to a ten per cent. solution weekly, in courses of from six to twelve injections.

Sulphur springs and radium waters: There is considerable evidence as to their usefulness. They give the patients change of surroundings while they attend to their business of getting well. I have been asked to tell when a syphilitic may safely marry.

Caveat Emptor: There is no clinical or pathological means by which we can be certain that one who has had syphilis can be married without risk, unless the disease has been treated continuously before the secondary symptoms have commenced.

ABSTRACT OF THE MINUTES OF THE NINETIETH MEETING OF THE COUNCIL.

Held at the Union League Club, San Francisco, March 3, 1917, 12:10 p. m.

Present: Kenyon, Aiken, Ryfkogel, Hamlin, Jayet, Bine, Ewer, Edwards, Parkinson, Pope and Peart.

Dr. Parkinson voted for Dr. Hoisholt by proxy.

Dr. Parkinson made excuses for Dr. Hoisholt, stating that the doctor was in the hospital, recovering from a surgical operation. The Secretary was instructed to send condolences and sympathy.

Minutes of the eighty-ninth meeting were read and approved as read.

Mr. Peart's Report on Legal Defense: Mr. Hartley Peart made a lengthy report of current work of the legal department.

Moved by Parkinson, seconded by Ryfkogel, that the consideration of the rules for the Indemnity Fund be postponed to some future meeting, whereat they could be discussed at more leisure. Voted and carried. Mr. Peart's report on Legal Defense filed.

The Secretary's Report.

Promotion of Medical Research: Receipt of a bill which provides for the procuring of dogs and other laboratory animals by purchase from the public pound. This was referred to the Committee on Legislation.

Committee on Legislation: A complete list of the bills on medicine which will be presented before the Legislature were referred to this committee. Moved by Hamlin, seconded by Jayet. Bills filed.

Power of Publication Committee: That the Publication Committee be given power to reject papers that may be presented for printing in the State Journal. There are, at present, enough papers in type to supply the Journal for fifteen months; and because of this excess, it was deemed necessary to limit the number by careful choice and exclusion.

Stenographers at the Coming State Meeting: The question of stenographers at the coming State meeting was discussed and the Secretary was directed to look up the rule regarding this matter and give a report at the next Council meeting (See minutes of 71st Council meeting).

McLaren, Goode & Company: The bill of McLaren, Goode & Co., auditing the books and establishing a new bookkeeping system in the Secretary's office, was referred to the Auditing Committee for their approval. Moved by Hamlin, seconded by Bine. Voted and carried.

A letter from the American Medical Association asking that the Society approve of its agents who are being sent out to increase county membership was read; that it be placed on file. Moved by Parkinson, seconded by Hamlin. Voted and carried.

The question whether or not a multigraph should be purchased in the office was discussed and it was agreed by general consent that this matter should be continued and that no immediate action should be taken.

Society attorney instructed to draft information concerning the Indemnity Defense. Moved by Parkinson, seconded by Ryfkogel that the Society attorney be instructed to draft information concerning the Indemnity Defense, and have this printed on a separate slip and placed in the Register. This was to be sent to each member of the Society.

The matter of office expenses and the proper segregation of these was discussed by Ryfkogel. It was moved by Ryfkogel, seconded by Bine, that a list of rules and regulations concerning the conduct of the office, and preservation of its records, be drawn up by Mr. Peart and Dr. Pope, and that these should be binding upon the members of the office staff of the Medical Society.

An election of the trustees for the Medical Defense Fund was held. The names of Adams, Briggs and Lobingier were selected to fill this office. The Secretary was instructed to advise these gentlemen of their election, and to instruct them in their duties concerning the trust placed upon them.

Legislative Amendment Introduced by McKee: It was moved by Bine, seconded by Jayet, that the proposed legislative amendment introduced by McKee, which permits the free choice of physicians in industrial accident work, receive the commendation of the Council at its endorsement. Voted and carried.

County Secretaries' Attention Called to Article 12: It was moved by Ryfkogel and seconded by Aiken that the Secretary be instructed to write a letter to each of the County Secretaries and call his attention to Article 12 of the by-laws, and to warn the Secretary that members of these component societies, whose names do not appear on our roster by February 1st, and whose dues are not paid by March 1st, forfeit their membership and their medical defense. The Secretary was instructed that no exception shall be made to this rule. Voted and carried.

Medical Defense Rules to be Discussed: It was moved by Dr. Parkinson and seconded by Dr. Edwards that the Council meet some evening in the next two weeks, preferably March 17th, to discuss the Medical Defense rules.

The meeting was adjourned.

SAXTON POPE, Secretary.

PROPOSED AMENDMENT TO THE CONSTITUTION OF THE SOCIETY.

Proposed Amendment to the Constitution of the Medical Society of the State of California. (See page 100 of the 1916 State Medical Directory.)

The amendment deals with the first sentence of Article VI of the Constitution, relating to officers, and omits two assistant secretaries, and adds three councilors-at-large, so that this sentence of Article VI will read as follows:

"Section 1. The officers of this Society shall be a President, a First Vice-President, a Second Vice-President, a Secretary, a Treasurer, Examiners or nominees for appointment as members of the Board of Medical Examiners, as may be required by the laws of the State of California governing the practice of medicine, and fifteen Councilors, of whom one shall be elected from each of the nine councilor districts, and six Councilors-at-Large."

The remainder of the Section and Article to remain as it now reads.

PROGRAM, MEDICAL SOCIETY, STATE OF CALIFORNIA, CORONADO, APRIL 17th, 18th, 19th.

TUESDAY MORNING, 9 O'CLOCK.

ADDRESS:
W. C. HARKLAND, Mayor of San Diego

INVOCATION:
REV. CHARLES SPAULDING, San Diego

ADDRESS OF WELCOME:
W. S. DORLAND,
President of Chamber of Commerce, San Diego

ADDRESS OF WELCOME:
F. R. BURNHAM,
San Diego County Medical Society

ADDRESS AND REPORTS OF COMMITTEES.

President's Address.....GEORGE H. KRESS

REPORT OF COMMITTEE ON MEDICAL LEGISLATION AND PUBLIC HEALTH.

PERCY T. PHILLIPS, Santa Cruz, Chairman.
C. C. Browning, Los Angeles; John C. King, Banning; W. A. Sawyer, Sacramento; N. K. Foster, Oakland.

REPORT OF COMMITTEE ON PUBLIC POLICY AND LEGISLATION.

GEORGE TUCKER, San Francisco, Chairman.
J. H. Parkinson, Sacramento; William LeM. Wills, Los Angeles; F. F. Gundrum, Sacramento; F. B. Carpenter, San Francisco.

REPORT OF COMMITTEE ON PUBLIC HEALTH.

H. P. NEWMAN, Chairman.

REPORT OF COMMITTEE ON ARRANGEMENTS.

JOHN C. YATES, Chairman.
Alfred H. Byars, A. D. Long, H. Clifford Loos, Robert Pollock.

REPORT OF COMMITTEE ON SCIENTIFIC PROGRAM.

ALFRED B. GROSSE, San Francisco, Chairman.
Harry E. Alderson, San Francisco; R. A. Peers, Colfax; Fitch C. E. Mattison, Pasadena.

SECTION CHAIRMEN AND SECRETARIES.

Eye and Ear Section.
DR. B. F. CHURCH, San Francisco, Chairman.
DR. HANS BARKAN, San Francisco, Secretary.

G. U. Section.
DR. VICTOR G. VECKI, San Francisco, Chairman.
DR. WM. E. STEVENS, San Francisco, Secretary.

Gynecology and Obstetrics Section.
DR. E. N. EWER, Oakland, Chairman.
DR. A. B. SPALDING, San Francisco, Secretary.

Nervous Diseases and Psychiatry Section.
DR. ANDREW W. HOISHOLT, Napa, Chairman.
DR. ROSS MOORE, Los Angeles, Secretary.

REPORT OF COMMITTEE ON SOCIAL INSURANCE.

RENÉ BINE, San Francisco, Chairman.
F. F. Gundrum, Sacramento; Harry M. Sherman, San Francisco; Geo. G. Reinle, Oakland; Geo. E. Tucker, San Francisco; Geo. H. Kress, Los Angeles; Alice M. Woods, San Francisco.

REPORT OF COMMITTEE ON INDUSTRIAL ACCIDENT INSURANCE.

C. P. THOMAS, Los Angeles, Chairman.
John H. Graves, San Francisco; Morton R. Gibbons, San Francisco; John C. King, Banning; B. F. Church, San Bernardino.

TUESDAY AFTERNOON, 2 O'CLOCK.

2A TUBERCULOSIS SYMPOSIUM.

Arranged by R. A. PEERS.

1. COMPLEMENT FIXATION IN TUBERCULOSIS.

BENJAMIN JABLONS.

Experiments of early investigators:
1. Results.
2. Various types of antigens used.

Recent investigations:
1. Types of antigens used.
2. Results.

Comparative investigation of salt extract, alcoholic, ethereal, digested extracts and commercial tuberculins, with positive cases of tuberculosis.

Results of test with salt extract of polyvalent strains:
1. Pulmonary tuberculosis.
   (2) Various stages.
2. Hodgkins disease.
3. Surgical tuberculosis.
4. Genito-urinary tuberculosis.
5. Eye cases.
6. In positive Wassermann cases.
7. In negative Wassermann cases.
8. In coccidioides infection.
9. In normal non-tuberculous cases.
10. In chlorosis.

Comparative results with positive Von Pirquet.

Character of immune bodies and comparison with antitryptic index of serum.

Discussion opened by MAX ROTHSCHILD.

2. DIFFERENTIATION OF SYPHILITIC AND TUBERCULOUS PULMONARY LESIONS.

WALTER KLOTZ.

Tuberculosis existing alone.
Syphilis existing alone.
Both conditions existing simultaneously.
Differential Diagnosis:
- History—Course and Onset.
- Physical Signs in Lungs.
- General condition and condition of other organs.
- Sputum Examinations—repeated.
- Wassermann.
- Complement Fixation of Tuberculous Antigens.
- X-ray and Fluoroscope.

Treatment:
- Indications and Contraindications for Salvarsan in cases with both syphilis and tuberculosis.

Discussion opened by WALTER BREM.

3. THE DIAGNOSIS OF TUBERCULOSIS.

GEORGE E. EBRIGHT.

Carelessness of history taking and incompleteness of examination the greatest sources of error in diagnosis.

History of patient:
- Family tendencies.
- Living surroundings and sources of contagion.
- Occupation.

Age of patient:
- Commonest types of tuberculosis in various periods.
- Glandular tuberculosis.
- Tuberculosis of joints and serous surfaces in children.
- Pulmonary tuberculosis.

Predisposing factors to tuberculosis:
- Natural immunity.
- Acquired immunity.
- Causes of reduction of immunity.

Symptomatology:
- (a) General.
- (b) Regional—central nerves—thoras.
  Abdominal organs.

Physical examination.
Laboratory tests.
Animal tests.

Discussion opened by R. A. PEERS.

4. SOME FURTHER EVIDENCE OF THE SITE OF PRIMARY LUNG INFECTION IN THE HILUS.

PHILIP KING BROWN.

A lantern slide exhibit of lung tuberculosis in which the primary infection evidently occurs in the hilus.

Discussion opened by M. P. BURNHAM.
P. H. PIERSON.

5. HELIOTHERAPY: ITS APPLICATION TO PEDIATRIC PRACTICE WITH SPECIAL REFERENCE TO BRONCHIAL GLAND TUBERCULOSIS.

WM. P. LUCAS.

Historical resumé of Heliotherapy. Its application hitherto has been mainly to bone tuberculosis. However, it has a very definite place in the treatment of bronchial gland involvement, not only tuberculous but also in other conditions which tend to lower the resistance of children. It is especially adapted to the treatment of children markedly below par who do not gain well under ambulatory treatment. The rest which accompanies the sun treatment as well as the diet and mechanical exercises are important factors in aiding the child to regain normal strength. Discussion of types of cases in which this has been tried and results. Limitations of heliotherapy and its wider application.
(20 minutes.)
(Lantern slides.)

Discussion opened by F. M. POTTENGER.

6. FACTS AND DEDUCTIONS FROM SIX YEARS' OBSERVATION OF AMBULATORY CASES OF TUBERCULOSIS.

C. C. BROWNING.

The author will cover the history and records on file during a period of six years.

Discussion opened by GEO. R. HUBBELL.

TUESDAY AFTERNOON, 2 O'CLOCK.

2B MEDICAL SESSION.

1. THE SIGNIFICANCE OF PERSISTENT PAIN OR OTHER SYMPTOMS REFERRED TO THE PERIPHERAL NERVES.

HAROLD WRIGHT.

Introductory:

The relation of the specialist to general medicine and the relation of the general practitioner or internist to the specialities.
The posterior nerve roots and pain; the sensitiveness of the dura mater, outer and inner layers.
Reflex pains in general; review of the sympathetic system.

(A) Cranial Nerves:

Gummatous infiltrations of meninges or the cranial bones; osteo-fibrous exostoses, post-traumatic or malignant; sinusitis; auto-toxic or focal infections with migraine; cerebral lues; brain tumor, e. g. cerebello-pontile angle and tic douloureaux; neuro-psychic headache, post-traumatic or functional.

(B) Cervico-brachial Nerves:

Arthritis of cervical spine with occipital neuralgia; arthritis of the shoulder with brachial pain; sub-deltoid bursitis; meningitis, luetic or pachymeningitis hemorrhagica; tuberculosis of the cervical vertebrae; fracture or subluxation of vertebrae; spinal cord tumor; giving pain in the shoulder often diagnosed "rheumatism" or "neuritis"; cardiac reflex pain; diaphragmatic pleurisy, giving reflex pain to the shoulder; aneurysm of the subclavian; postural strain; a frequently overlooked and common source of chronic pain between the scapulae, of "neurotic spine" and chronic ill health.

(C) Lumbo-sacral Nerves:

Tabes; frequency of laparotomy in tabes; luetic meningitis; cauda-equina tumor; aortic aneurysm; renal calculus; old fracture of vertebrae, unrecognized because of failure to properly x-ray; arthritis, hypertrophic and gonorrheal; of the spine and of the sacro-iliac joints; pelvic disease, in women especially; flat foot or weak foot; postural strain on the lumbo-sacral and the sacro-iliac joint; or from trauma; vicero-optosis, from postural defects, causing abdominal pains simulating appendix or gall bladder disease; the comparative rarity of essential sciatica with reflex sciatic pains; the greater frequency of postural strain as a cause of chronic backache in women than of pelvic defects.

2. KIDNEY FUNCTION IN CHRONIC NEPHRITIS AS DETERMINED BY MARSHALL'S UREASE METHOD FOR ESTIMATING BLOOD UREA NITROGEN.

E. H. FALCONER.

Von Jaksen in 1893 showed that there was marked increase in non-protein nitrogen in the blood in chronic nephritis. Much work has been done along this line by other investigators since. The work of Tilleston and Comfort in 1914 on estimation of non-protein nitrogen and urea of blood in health and disease furnished reliable figures for the normal. Estimation of total non-protein nitrogen is too time-consuming and requires too much special apparatus for use as a clinical procedure. In 1913 Marshall demonstrated that the ferment of the soy bean, called by him urease, was specific for decomposing urea into ammonia which can be easily estimated by driving over into 6/.50 HCl and titrating against N/50 NaOH.

Here description of apparatus and method follows.

This method has been followed at the University of California Hospital in the medical service of Doctor H. C. Moffitt. Cases selected for this report are those diagnosed as chronic nephritis or those whose clinical symptoms suggested that they might be classified as chronic nephritis. Kidney function in these cases was estimated by the phenolsulphonephthalein excretion in the urine and the urea nitrogen retention in the blood as determined by the urease method.

These cases have been tabulated according to clinical and laboratory findings as chronic nephritis primary, Table I and chronic nephritis secondary, Table II. These tables are arranged in such manner that one may correlate the history of symptoms, urinary findings, phthalein excretion, urea nitrogen retention in the blood and the clinical diagnosis with the post-mortem findings and subsequent history of the patient. It has not been possible to obtain the subsequent history of many of these cases. Only cases whose history or laboratory findings suggested chronic nephritis have been selected. In Table II the cases show a variety of pathological lesions. Only kidney lesions, however, appear to influence urea nitrogen in the blood. Whipple and coworkers have shown that in intestinal obstruction the total non-protein nitrogen is high but the urea nitrogen does not rise in proportion, an important point. Work is being done at present in the medical wards of the University of California Hospital tending to show that just before death the total non-protein nitrogen rises in the blood.

An analysis of tables I and II would seem to justify the following conclusions:

1. That in cases clinically chronic nephritis where the urea nitrogen is near or above 30 mg. per 100 c.c. of blood and the phenolsulphonephthalein excretion in the urine is low the case is probably a primary chronic nephritis of long standing and the prognosis is grave.

2. Cases clinically suggesting chronic nephritis and cardiovascular disease where the urea nitrogen is about 20 mg. per 100 c.c. of blood or below, are probably chronic nephritis secondary to primary cardiovascular disease. The phenolsulphonephthalein excretion in these cases may be low if there is chronic passive congestion of the kidneys present, otherwise it should be above 30%.

3. Cases whose urea nitrogen in the blood is between 30 mg. and 85 mg. per 100 c.c. of blood will probably not live longer than from six months to one year; where the urea nitrogen is over 100 mg. per 100 c.c. of blood the prognosis is a fatal termination in a few days to two or three weeks.

4. On account of the ease with which this test can be performed and the brief time consumed it is a practical clinical procedure and of definite value in estimating kidney function and in more accurate diagnosis and prognosis in chronic renal disease.

3. THE PRESENT STATUS OF THE WASSERMANN REACTION.

H. R. OLIVER.

1. A summary of the status of the test as result of personal observation based upon several thousands of tests.

2. The specificity of the test in regard to other diseases or foreign conditions that may cause either a positive or negative reaction.

3. A table of the percentage of positive reactions in the various stages of the disease and the different anatomical lesions.

4. The date of its appearance in the blood and some of the causes of its delay and factors so influencing.

5. The variations in the amount of binding substance in different sera.
A discussion of the so-called Wassermann fast cases.

6. The different results with different antigens.

7. The Wassermann reaction with spinal fluids and the dosages used, and the percentage of results with different cerebrospinal disease quantitatively.

8. Its use as a control on treatment—the so-called provocative test.

9. The interpretation of the results and the reading of the symbols so indicating.

10. Conclusions based on an analysis of the above results.

4. RESULT AND TREATMENT OF ONE THOUSAND CASES OF DELIRIUM TREMENS.

R. E. BERING.

This paper deals with cases from private practice, and from the author's services at the Central Emergency and the Lane Hospitals. The symptomatology of the various types of the disease is taken up with appropriate methods of treatment adapted to each particular type. Complications and their treatment, the percentage of recoveries and the percentage of mortality is next considered. Results are tabulated and conclusions drawn.

5. COMPLICATING SECONDARY PATHOLOGY IN GASTRO-INTESTINAL SURGERY.

CHAS. B. HARE.

Gastro-intestinal disturbances when surgical are seldom simple but usually complicated by secondary affections a result of the primary pathology.

The most common chronic affection demanding surgical interference is chronic appendicitis, congenital or acquired, and its sequelae.

Pathological states that are subjects of operation may be secondary to some primary focus, their symptoms overshadowing the symptoms of the primary disease; and under these circumstances the predominant symptoms may be considered primary; the cause initiating them occupying a less prominent position but demanding surgical attention at the same time to effect a cure.

Before surgical interference is undertaken every effort should be made by means of a history and barium analysis to arrive at all of the factors entering into the disturbance, the operator should not be satisfied, however, with pre-determined conclusions, but when the abdomen is opened should inspect all of the sphincters, the bile tract, gall bladder and the sigmoid in all its bearing.

WEDNESDAY MORNING, 9 O'CLOCK.

3A SURGICAL SESSION.

1. INTERNAL HEMORRHOID OPERATION AND AFTER CARE UNDER QUININE-UREA HYDROCHLORIDE ANESTHESIA.

E. JAY CLEMONS.

Synopsis: The object of this paper is not to add anything new to medical literature but to present, with due respect to other Proctologic technic, a technic which will relieve our patient—pleasantly, safely and quickly; classifying internal hemorrhoids in terms of degree; bringing out the object of operative interference; giving some of the operative and post-operative advantages of quinine-urea hydrochloride anesthesia; describing the operative technic, in four stages; concluding with the post-operative care and conclusions.

2. PAINFUL CONDITIONS IN AND ABOUT THE SHOULDER JOINT—THEIR DIAGNOSIS AND TREATMENT.

ARTHUR L. FISHER.

Apparent indefiniteness of the painful conditions in and about the shoulder; reasons for such indefinite ideas; lack of systematic methods of diagnosis of such conditions.

Innumeration of conditions causing pain in shoulder region.

Scheme of Diagnosis:
- Methods of examining patient himself.
- X-rays and their interpretation.
- Laboratory methods.

Treatment:
- Present treatment more or less empiric.
- Suitable methods of treatment following positive diagnosis.

3. THE VALUE AND LIMITATIONS OF THE MOVING PICTURE IN TEACHING SURGERY.

JAMES T. WATKINS.

Synopsis: The moving picture as a teaching aid has come to stay. Advantages are that group teaching is simplified; the operations can be repeated as often as necessary; the operations can be transported to other communities. Disadvantages are that thus far only operations on the surface of the body or near its surface can be pictured; that only in blood-free operations can fine technic be shown; that the problem of differentiation of tissues has not yet met with a practical solution.

(15 minutes.)

Discussion opened by W. B. DAKIN.

4. THE CORRECTION OF MALUNITED FRACTURES.

P. S. CAMPICHE.

Owing to certain adverse circumstances, faulty union still occurs in a large number of fractures.

The surgeon and the patient then become so discouraged that no further step is taken for a long time, some patients remaining many months in a crippled condition before another surgical intervention is proposed and accepted.

Such pessimism and discouragement on the part of the treating surgeon is excessive and unjustified. Even in cases that have apparently ended in disaster, surgery and patience can often restore enough function and save quite a good deal from the wreckage.

Instances of such "salvage surgery":

A—for the upper extremity.
B—for the lower extremity.

Conclusions.

(10 minutes.)

Discussion opened by A. S. LOBINGIER.

5. AN EXPERIMENTAL STUDY OF THE RESECTION OF THE KNEE-JOINT.

JOHN F. COWAN.

Conclusions drawn from experimental work done on the knee joints of dogs in the laboratory of surgical pathology of Stanford University Medical School. To this is added a description of tissue removed from human joints that had previously been resected.

(12 minutes.)

Discussion opened by ELLIS JONES.

6. FRACTURES OF THE NECK OF THE FEMUR.

S. J. HUNKIN.

A plea for more optimistic ideals and a more consistent plan of treatment.

It considers the structural changes which generally lead to such fractures and which also interfere with its repair. Speaks of the results, expected and attained, after the usual plan of treatment and considers the average bad result due to two things:

1st—The pessimistic outlook of the doctor.
2nd—The bad mechanical efficiency of the ordinary plan of treatment.

It deals with later methods which are eminently superior, suggests a plan of his own in certain types. The author thinks proper splinting to be of absolute importance and argues that under careful planning and ordinary circumstances practically as good end results can be expected as with corresponding fractures elsewhere.

(15 minutes.)

Discussion opened by H. A. L. RYFKOGEL.

7. THE EMPLOYMENT OF THE INTRAMEDULLARY BONE SPLINT IN FRACTURES.

CHARLES G. LEVISON.

(a) Advantages of this graft over the bone inlay.

(b) Removal of the graft from the fractured bone, doing away with the necessity for operating the uninjured leg.

(c) Comparison of the results of the intramedullary graft with the bone inlay.

(d) Has the bone graft rendered the Lane plate unnecessary?

(15 minutes.)

Discussion opened by W. W. RICHARDSON.

WEDNESDAY MORNING, 9 O'CLOCK.

3B MEDICAL SESSION.

1. RADIUM—ITS LOCAL APPLICATION AS A THERAPEUTIC AGENT.

REX DUNCAN.

The author discusses briefly some of the physical properties of radium, the various forms of applicators and technique of application, with especial reference to dosage, screening, etc. The action of the rays and histological changes produced in morbid tissues by radiation are briefly described. The value of radium in the treatment of various malignant and non-malignant conditions is considered, including certain skin diseases, exophthalmic goiter, spring catarrh, angiomata, uterine fibroid, epitheliomata, sarcomata and carcinomata with especial reference to the carcinomata uteri. A large number of cases treated by the author are reported.

Discussion opened by C. G. TOLAND.

2. HODGKIN'S DISEASE AND ITS TREATMENT—WITH A REPORT OF CASES.

W. W. BOARDMAN.

I. Introduction:
   Descriptive definition.
II. Body:
   Brief of historical review.
   Review of recent work on etiology.
   Absence of a specific therapy.
   Consideration of our present therapeutic measures.
   Report of cases.
III. Conclusions.
(15 minutes.)

Discussion opened by R. L. CUNNINGHAM.

3. BOTULISM.

ERNEST C. DICKSON.

The report will consist of a discussion of this type of food poisoning which is endemic on the Pacific Coast. It will include:

1. A report of ten unrecorded cases which have occurred in California and in Oregon within the past three years.

2. A discussion of the pathologic findings as illustrated by two autopsies and a series of experimental investigations.

3. A discussion of the etiology as illustrated by the reported cases and also by experiment.

There will be a series of lantern slides to illustrate the important pathologic changes.

Discussion opened by ROBERT SMART.

4. MULTIPLE SEROSITIS—REPORT OF A CASE WITH AUTOPSY FINDINGS—DISCUSSION OF ITS CLASSIFICATIONS.

GEO. H. EVANS.
M. J. PRICE.

Reference to the classification given by Kelly, Rolleston and others is given.

Pick's disease is not synonymous with multiple serositis. A broader classification is necessary. Author's case differs from those included in Kelly's monograph in that it did not present obliterative pericarditis but rather pericardial effusion. Clinical findings of case presented and discussion of autopsy report.
(15 minutes.)

Discussion opened by E. von Adelung.

5. RAT-BITE FEVER.

F. F. GUNDRUM.

Definition.
Distribution: California cases.
Etiology.
Transmission.
Pathology.
Incubation.
Symptoms: Skin; glandular; temperature; blood; urine; complications.
Prognosis.
Prophylaxis.
Treatment.
Report of Cases.
(10 minutes.)

Discussion opened by DAN H. MOULTON.

6. CELLULAR AND HUMORAL FACTORS IN ANAPHYLAXIS AND IMMUNITY.

W. H. MANWARING.

Summary: An analysis of the anaphylactic and immune reactions by means of the isolated rabbit heart, the isolated guinea pig lung, and the isolated guinea pig liver.
(15 minutes.)

WEDNESDAY AFTERNOON, 2 O'CLOCK.

4A EYE, EAR, NOSE AND THROAT SESSION.

Session of General Interest,

Arranged by HANS BARKAN.

1. TUBERCULOSIS OF THE EYE.

PHILIP H. PIERSON.

Abstract: The main lymph channels of the eye and their drainage; a brief description of the most important lesions produced by tuberculosis; its diagnosis with special reference to latent tuberculosis elsewhere in the body and the use of tuberculin; the treatment of ocular tuberculosis general, and with tuberculin.

2. LARYNGECTOMY INDICATIONS AND TECHNIC.

H. B. GRAHAM
and L. C. DRAPER.

Abstract: The authors will describe the methods of laryngectomy and will discuss the pathological indications for operative procedures in cases of carcinoma of the larynx, including the intra-laryngeal and extra laryngeal operations.

3. AN IDEAL INTRACAPSULAR EXTRACTION FOR CATARACT.

LLOYD MILLS.

Abstract: Those American sponsors for the Smith "Indian" cataract extraction, who are spreading among untrained or poorly-trained men the gospel that the Smith technic is easily acquired and easy of safe human application, are doing a most excellent operation a serious injustice.

That extraction of the lens in its intact capsule is the ideal form of extraction is beyond debate, but the present consensus of opinion among American ophthalmologists is strongly to the effect that the Smith operation is one to be undertaken only by men whose technic is skilled and whose control and judgment are not easily shaken during the startling emergencies of intraocular surgery.

The faults of the Smith operation as applied to cataracts without selection are (1) the frequency of unintentional capsulotomy in those cases where the anterior chamber is shallow, nearly all the capsule being left behind, together with much more cortex than usually remains after the most bungling capsulotomy operation; (2) in the Smith extraction with iridectomy, as advocated, delivery of the encapsulated lens becomes too easy and if the delivering pressure is continued too long or too ungently, or if the frail hyaloid membrane, now supporting the dislocated and bulging vitreous without aid from the iris, be subjected to the additional stress which so surely follows subduction, then sudden rupture of the hyaloid occurs, with loss of vitreous and more or less extensive prolapse of the pillars of the operative coloboma.

Reasoning from the ease of delivery of the encapsulated lens through the intact pupil in the eyes of pigs and kittens and from the splendid results of simple extraction combined with the fine peripheral iridectomy of Chandler (Hess-Pflüger), Mills, using the Smith incision, has made the successful application of this form of iridectomy, after the delivery of the lens in its capsule through the intact pupil. The iridectomy is safely performed after the pupil has been strongly contracted by 1% eserine for ten to twenty minutes, the flattening of the iris produced thereby, molding the dislocated and bulging vitreous back into place and away from the wound.

1% eserine is instilled with especial care twice daily for the first week of convalescence.

This operation is applicable to any form of cataract which is associated with an anterior chamber of sufficient depth to preclude an unintentional capsulotomy.

The final result is cosmetically and visually perfect. The small central or nearly central pupil is mobile, the intact ring of iris prevents excessive flooding of the fundus with light and, save on close inspection, the operated eye can seldom, if ever, be distinguished from its fellow.

4. END RESULT IN THE TREATMENT OF OZENA BY MEANS OF VACCINE.

HENRY HORN.

Abstract: Recapitulation of bacteriological findings; results reported last year confirmed in every particular; summary of results on last year's series of cases; results of treatment of present series; conclusions.

WEDNESDAY AFTERNOON, 2 O'CLOCK.

4B GENITO-URINARY SYMPOSIUM.

Arranged by ALFRED B. GROSSE.

1. PRACTICAL VALUE OF THE COMPLEMENT FIXATION TEST IN GONORRHEA.

MARTIN KROTOSZYNER.

This communication is based upon the result of over 500 sero-diagnostic examinations of all types of gonorrheal infections that came under the author's observation during the last two years. A careful tabulation of the material on hand is presented with a view to arrive at deductions of practical value for physicians and patient. The points particularly interesting and in need of further elucidation, in this connection, are:

Relation of serological to clinical findings and its practical significance; change serological result from positive to negative as index of extinction of infection; value of test with regard to the all important questions of continued infectiousness and contemplated matrimony.

Conclusions.

2. FREQUENCY AND SIGNIFICANCE OF CASTS IN THE URINE.

STANLEY BLACK.

Formation of casts in the urine.
Cylindroids.
The methods of search of the urine for casts.
Casts found in healthy individuals; that is, without any other evidence of disease.
Casts found in pathological kidney lesions.
Significance of casts and cylindroids.

3. DEMONSTRATION BY MEMBERS OF PYELOGRAMS AND X-RAY PLATES DIAGNOSTIC OF KIDNEY TUMOR.

Discussion opened by GRANVILLE MACGOWAN.

THURSDAY MORNING, 9 O'CLOCK.

5A SURGICAL SESSION.

1. GROUP STUDY IN THE ESTIMATION OF SURGICAL RISK.

F. W. BIRTCH.

(a) The consideration of surgical risk in its broader aspect, such as mortality, morbidity, delayed recovery, complications, etc.
(b) The consideration of the mistakes in diagnoses as being responsible for the medical profession's shortcomings in being able to forecast the outcome of an operation,—as based upon the reports from literature in autopsy findings, operative descriptions and the results from treatment.
(c) A presentation of a scheme for estimating the surgical risk,—from the statistics of the Diagnostic Section of St. Luke's Hospital.
(d) The conclusion will bring out the probable effect such groups will have on the future of surgery.
(15 minutes.)

Discussion opened by F. F. GUNDRUM.

2. EXOPHTHALMIC GOITRE—INDICATIONS FOR SURGICAL INTERVENTION—CHOICE OF PROCEDURE.

A. B. COOKE.

This discussion limited to exophthalmic goitre or Graves' disease. Hyperthyroidism and thyrotoxicosis preferable designations, since exophthalmos not a constant or essential feature. Always to be considered a formidable disease with little tendency to spontaneous recovery.
The factors of danger in hyperthyroidism; how death is caused.
The heart the most important guide in determining the line of management. If improvement not at once apparent under hygienic and medicinal treatment, surgical intervention to be considered. This to be resorted to early, since the danger rapidly increases with delay. Many cases lost which might be saved by prompt surgery.
In deciding upon the surgical procedure each case to be judged on its own merits. Experience the only safe guide. Important to bear in mind Crile's dictum that "it is the first surgical contact which kills these patients."
In favorable cases always desirable to adopt at once the curative procedure, i. e., lobectomy. When this involves too great hazard, ligation of the superior thyroid arteries should be done and the radical operation deferred until the improvement warrants it. The injection of boiling water has nothing to commend it.
Anoci-association offers the safest method for handling these cases.
(12 minutes.)

3. AMPUTATION STUMPS AND ARTIFICIAL LEGS.

LEO ELOESSER.

Requirements of stumps; physiological stumps, end-bearing and side-bearing; pathological stumps, pain, ulceration, atrophy; causes, neuromas, periostitides, scars, insufficiency of skin and soft parts, atrophy of disuse; prophylaxis; treatment of bone and soft parts at primary operation; treatment of neuromas, ulcers, periostitides; stump-plastics.
Artificial legs: How the leg carries the wearer, end-bearing and side-bearing stumps; how the wearer carries the leg; suspension of leg after Dollinger, suspension from shoulder-braces and belts.
(15 minutes.)

Discussion opened by EMMET RIXFORD.

4. TUMOR OF THE CAROTID GLAND.

STANLEY STILLMAN.

A brief résumé of cases previously reported.
A consideration of the mortality following ligation of the common carotid, which has usually been done in the removal of this growth.
Report of a case of successful removal without ligation of either common or internal carotid.
Report of two other cases; one with ligation of the common carotid with a fatal termination; the other with ligation of the common carotid with recovery of the patient.

5. DIVERTICULUM OF THE DUODENUM.

E. C. MOORE.

Report of a case; literature on the subject; lantern slide exhibit.

6. SOME IMPORTANT FACTORS IN DISEASES OF PERIPHERAL NERVES.

THOMAS G. INMAN.

Causation:
- A. Individual vulnerability.
  - 1. Racial and familial tendencies often not definitely ascertainable; phylogeny of peripheral nerves, an unknown factor in their diseases.
- B. Toxic influences.
  - 1. Poisons introduced from without.
  - 2. Poisons formed within the body.
    - a. Bacterial.
    - b. Metabolic.
- C. Physical causes.
  - 1. Nutrition.
  - 2. Temperature.

Pathology and Distribution:
- A. Radiculitis sometimes not to be distinguished from an affection of the peripheral nerve which carries the fibers of the affected root.
- B. Posterior root ganglionitis more often the cause of nerve disturbances than is generally supposed.
- C. Elective disturbances of various types.

Prognosis:
- A. Depends upon the nature and amount of pathology present and the ease or difficulty of removing the cause; course often necessarily long and this fact must be impressed upon the patient at the beginning of treatment.
- B. Detrimental influence of coincident diseased conditions.

Treatment:
- A. Removal of cause if this can be determined and care of all conditions which mitigate against recovery.
- B. Care of focal infections, arterio-sclerosis, etc.
- C. Counter irritation.
- D. Massage.
- E. Heat; diathermia.
- F. Improvement of general condition.

Incidence of peripheral nerve disturbances and causative factors in 300 cases completely examined.
(10 minutes.)

THURSDAY MORNING, 9 O'CLOCK.

5B MEDICAL SESSION.

1. MOVING PICTURE STUDIES OF THE MOTOR PECULIARITIES OBSERVED IN STEREOTYPIC AND KINDRED MUSCULAR MOVEMENTS IN FORMS OF DEMENTIA PRAECOX AND IN THE MOVEMENTS OF HUNTINGTON CHOREA.

A. W. HOISHOLT.

1. The nature of negativism and the manner in which it is reflected in muscular movements; stereotypy in posture and movements; case histories; kinetoscopic demonstration of the manner in which the repetition of certain more or less complicated muscular movements, varying in form and duration, are interrupted by statuelike crystallizations, leading to manifestations of phases and pauses.
2. Kinetoscopic pictures of the peculiar, irregularly jerky, large excursioned movements of trunk and extremities in two women patients presenting symptoms of an advanced stage of Huntington chorea.
(30 minutes.)

2. PERMEABILITY OF THE MENINGES TO ARSENIC IN PARESIS AND TABES.

J. H. BARBAT.

Previous work would indicate that meninges are almost impermeable to arsenic. By author's technic, arsenic can be demonstrated in almost all cases, 24 hours after its intravenous administration. Technic; report of cases; advantage over Swift-Ellis method.
(10 minutes.)

3. ULCERATIVE COLITIS.

H. C. MOFFITT.

Introduction to deal with a short sketch of the occurrence of entamebic and bacillary dysentery in Cali-

fornia. Mention only of the ulcerative colitis of diphtheria, nephritis, tuberculosis, intoxications.

Clinical picture of ulcerative colitis here considered:

1. Type with superficial hemorrhagic erosions and shallow ulcers; secondary anemia and occult blood in stools sometimes the only clinical symptoms.
2. Type with fever, wasting and other symptoms of a general infection with few local symptoms.
3. Type with deep ulceration, marked local symptoms and secondary stenosis of the gut; frequent limitation to short segments of the colon, especially the upper rectum.
4. Chronic type often affecting a small portion of the colon without symptoms until stenosis occurs; peculiar local extension of this process even after resection of portions of the bowel; polyposis frequently associated with other hypertrophic changes in the gut.
5. Acute or chronic types with diarrhea, cachexia and frequent fatal termination associated with ulceration, superficial or deep, throughout the colon; difficulty of separating this type from chronic amebiasis.
6. General clinical résumé of the affection, literature and case reports; pathology, bacteriology, pathological specimens; medical treatment, local and general; surgical treatment by appendectomy, colostomy, resection.

(15 minutes.)

Discussion opened by RAE SMITH.

4. TREATMENT OF HEMORRHAGIC CONDITIONS.

S. H. HURWITZ.

Brief consideration of the normal factors concerned in the clotting of blood in health and their variations in disease.

Discussion of an etiologic classification of hemorrhagic diseases based upon some abnormality existing in one of the factors concerned in the clotting of blood in health.

A consideration of the more important clinical methods now available for the study and classification of this group of disease with special emphasis upon those methods whose simplicity render them clinically useful.

Brief discussion of a rational and critical therapy for the constitutional treatment of the hemorrhages observed in bleeding conditions with special reference to the knowledge gained from a study of these conditions by present day methods.

Discussion opened by WALTER BREM.

5. MAGNESIUM SULPHATE INTRAVENOUSLY IN BACTERAEMIA.

W. H. STRIETMANN.

Review of Harrar's work, and method; effect on animals of magnesium sulphate alone; author's modification and difference in effect following its use; case reports of Streptococcus Viridans, Streptococcus Hemolyticus, Colon and Influenza Bacteremias; theoretical possibilities as to mode of producing effect. Conclusions.

6. THE RELATION OF MEDICINE TO CRIMINOLOGY.

JAU DON BALL.

Synopsis: Definitions; Examination of the Criminal; Medical Causes of Crime; Sociological, Neurological and Serological Aspect of Prostitution; Discussion of Interrelationship of Crime and Prostitution and Their Connection with Medicine; the Juvenile Delinquent; Prophylactic Measures.

(15 minutes.)

THURSDAY AFTERNOON, 2 O'CLOCK.

6A SYMPOSIUM ON FUNCTIONAL PATHOLOGY.

Arranged by FITCH C. E. MATTISON.

1. THE RELATION OF THE VEGETATIVE NERVOUS SYSTEM TO INTERNAL DISEASE.

F. M. POTTENGER.

Vegetative nervous system composed of two antagonistic divisions; sympathetic and greater vagus; normal action holds equilibrium in all internal viscera; disturbance in either division produces functional derangement; relation of symptomatology in internal disease to vegetative system; relationship to the internal secretions.

Discussion opened by THOMAS ORBISON.

2. THE RELATION OF THE ENDOCRINE GLANDS TO FUNCTIONAL DISORDERS.

HENRY H. HARROWER.

Many if not all metabolic disorders have as their fundamental pathology a disturbed function of certain of the glands of internal secretion. The study and treatment of the so-called "chronic" diseases is made doubly profitable if the functional capacity of the thyroid, adrenals, pituitary and gonads is investigated. The thyroid, especially, is concerned with many every-day disorders from colds to neurasthenia.

3. THE PATHOLOGICAL PHYSIOLOGY OF THE THYROID.

CLARENCE TOLAND.

Discussion opened by E. H. SCHNEIDER.

4. THE RELATION OF THE HYPOPHYSIS TO THE DISORDERS OF NUTRITION.

W. W. ROBLEE.

Brief statement of facts concerning the physiology of the gland; the pathology underlying hyper and hypo-pituitarism; report of case of hypo-pituitarism, showing great improvement under treatment.

Discussion opened by WALTER BREM.

5. METABOLISM AND DISEASE.

LORENA M. BREED.

Chemical composition of body; body processes; chemical substances which increase protein metabolism; substances which depress protein metabolism; results of altered chemical processes in the body.

Discussion opened by R. S. CUMMINGS.

THURSDAY AFTERNOON, 2 O'CLOCK.

6B MEDICAL SESSION.

1. VALUE OF THE WASSERMANN TEST IN NEWLY-BORN.

H. H. YERINGTON.

1. Blood Findings in the newly-born.
   - A. Large percentage of Positive Wassermann findings in cord bloods.
   - B. Value of heel-blood examinations.
2. Points to be considered in the work.
   - A. Type of cases.
   - B. Reliability of blood work and technic.
   - C. Tests on mothers, fathers, children.
   - D. Histories, autopsies, placental pathology.
3. Comparisons of the bloods of mothers, fathers and infants.
4. Placental pathology.
   - A. Positive and suggestive cases.
   - B. Still-births and abortions in relation to placental findings.
5. Follow-up work.
   - A. Observation of suggestive infants after delivery.
   - B. Comparison of later blood tests with those made at birth.
6. Conclusions.

(15 minutes.)

2. MONGOLISM.

RACHAEL L. ASH.

Langdon-Down, in 1866, first described that variety of congenital imbecility which bears a certain physical resemblance to the Mongolian race.

Mongolism occurs in all countries. It forms five to eight per cent. of the feeble-minded in institutions. As the great majority of these imbeciles, owing to their lack of resistance to pulmonary and kindred disorders, die in early childhood, their actual number must be very much greater.

These children, in more than fifty per cent. of the cases, are the last born of repeated pregnancies, where one or both parents approach or are in the fourth decade. Hence, we may consider sexual exhaustion—functional disturbance of the reproductive organs and their related glands of internal secretion—as the great etiological factor.

As dentition, locomotion and speech are very much retarded, mongolism must be carefully differentiated from cretinism, rachitis, amyotonia congenita and chondrodystrophy.

(To be given in connection with lantern slides.)

Discussion opened by ROSS MOORE.

3. THE USES OF EIWEISS MILK.

LANGLEY PORTER.
FLORENCE HOLSCLAW.

1. Diarrheas in infancy; their etiology.
2. Classifications of Diarrheas.
   Etiological—clinical.
3. The conception of diarrheas as phases of metabolic disturbances.
4. The Finkelstein classification of metabolic disturbance with a special reference to dyspepsia.
5. The Milch Naehr Schaden of Czerny. Its origin in putrefactive processes in the bowl.
6. Finkelstein's idea that putrefaction may be utilized to combat fermentation.
7. The factors that encourage putrefaction; (a) high protein; (b) high fat; (c) high salts; (d) low carbohydrates, preferably maltose; (e) absence of lactose.
8. The chemistry—high calcium soap production. Low fatty acid production.
9. The elaboration of Eiweiss Milch; (a) the early formula; (b) the disastrous results of restricting sugar. Finkelstein's change of view.

10. The N. Y. Baby Hospital Modification.
    The salt water washing.
    The addition of fat in refractory cases.
    Value in infectious cases.
    The need for either hygienic and therapeutic measures.
    Illustrative cases.

Discussion opened by LEO MEININGER or GEO. LYMAN.

4. THE LIVER FUNCTION IN CHILDREN.

J. A. COLLIVER.

Research work in Prof. von Pirquet's Kinderklinik, Vienna, based on ingestion of from 10 to 80 grams of galactose in 65 pathogenic and 50 normal children; method; amount and time of elimination in each case; qualitative test, urobilin, bile pigment and aldehyd; quantitative sugar with polaroscope; tabulation of normal cases; icterus-haemorrhagica; chlorosis; tuberculosis, etc. Conclusion.

Camphor Elimination in Children.

Research work in Prof. von Pirquet's Kinderklinik, Vienna, based upon ingestion of from 1 to 2 grams of camphor in 16 normal and 10 pathogenic cases. Method; amount and time of elimination; orcin test; naphthoresorcin test; phloroglucin test; quantitative camphor elimination by polaroscope; tabulation and conclusion.

5. SOME PROBLEMS IN STARCH DIGESTION IN INFANCY AND CHILDHOOD.

E. C. FLEISCHNER.
A. E. MEYERS.

1. Frequency of starch intolerance.
2. Physiology of carbohydrate digestion.
3. Symptom-complex of starch disturbances.
4. Possible factors determining disturbances in the physiology.
   (a) Abnormal ferments.
   (b) Abnormal peristalsis.
   (c) Abnormal bacterial flora.
5. Stool examinations as a means of determination.
6. Test diets as a means of determination.
7. Normal carbohydrate diet in infancy and childhood.
8. Variations from normal in disturbances of digestion.

Discussion opened by W. P. LUCAS.

6. THE TREATMENT OF INFANTILE PARALYSIS.

JOHN CARLING.

Acute Stage. Proper treatment minimized damage to muscles. The importance of orthopedic measures to prevent deformity.

Sub-Acute Stage. Danger of overstraining weakened muscles. Measures to restore lost power.

Chronic Stage. Correction of deformity, if present. Measures to restore balance of muscular power and stability of joints.

Post-operative treatment to strengthen transplanted muscles and train them to co-operate with others.

TUESDAY AFTERNOON, 2:30 O'CLOCK.

PROGRAM OF THE EYE, EAR, NOSE AND THROAT SECTION OF THE CALIFORNIA STATE MEDICAL SOCIETY.

1. REPORT OF A CASE OF DEAFNESS OF SEVENTEEN YEARS' STANDING WITH SEEMING RECOVERY.

H. STAATS MOORE.

This is a report of a recovery of a reported deaf ear—the deafness caused by an accident when very young—followed by years of deafness and without any cause—a return of hearing—he had been examined by a number of men some years past and told his hearing would never be recovered.

2. CONGENITAL OCCLUSION OF THE NOSE.

HARVARD McNAUGHT.

Causes of congenital occlusion. Rarity of condition. Brief review of development of nose in foetal life. Operative measures in use for relief of condition and their defects. Report of author's case. Description of an original method of operation for correction of this condition.

3. HEADACHE AND SECONDARY SYSTEMIC DISTURBANCES CAUSED BY INTRANASAL AND NASAL SINUS CONDITION.

ADOLPH BAER.

A review of Oro, Naso, Pharyngeal conditions frequently overlooked as possible etiological factors in production of headache. In the mouth caries; pyorrhea; pericementitis; acute abscesses; chronic abscesses at the root of apparently healthy teeth; pulp stones; unerupted and impacted teeth; necrosis of maxillary bones; neoplasms at base of tongue; salivary cysts and calculi. In the pharynx, purulent tonsils and adenoids; and postnasal fibromata; in the nose deviated septa, hypertrophied turbinates, hypertrophies of septum tuberculi, uncinate process, bulla ethmoidalis, polypoid degenerations and purulent suppurations in the antrum, frontal, ethmoid, and sphenoid sinuses.

Acting either as sites of focal infection producing headaches by auto-intoxication, or by pressure causing reflex and referred nerve pains.

4. MALIGNANCY OF THE MIDDLE EAR AND MASTOID.

F. A. BURTON.

Introduction—condition rare, probable reasons for its infrequency.

Review of Literature:

Report of a case occurring in author's practice, of epithelioma, probably beginning in middle ear, the extent of its involvement, microscopical report of pathologist, micro-photographs and post mortem findings.

WEDNESDAY MORNING, 9:30 O'CLOCK.

1. SOME NEW POINTS IN THE TECHNIC OF THE SUBMUCOUS RESECTION.

F. M. SHOOK.

The Submucous Resection of the Nasal Septum. Indications for and technic.

I. Impaired respiration of nasal origin.
   1. Causes.
   2. Results.
      a Tubo-tympanic inflammation.
      b Chronic catarrhal Otitis.
      c Impaired sinus drainage with resulting pathological changes.
      d Reflex conditions.
      Asthma and spheno palatine ganglion neuralgia.

II. Technic.
   1. Anesthetization.
      a Author's method.
   2. The incision.
   3. Methods of elevation of the mucosa.
   4. Resection of the cartilage—a safe method with no danger of dislocation of the cartilage.
   5. A safe method of isolating the bony septum from danger areas.
   6. Dissection and removal of nasal spine.
   7. Removal of nasal ridge.
   8. The cutting and suturing of the mucous membrane flap.
   9. The post-operative packing.
      Illustration of technic with anatomical preparations.

2. WHAT CAN WE DO TO IMPROVE OUR BUSINESS METHODS?

P. A. JORDAN.

One physician to every six hundred people in the United States. An increasing number of specialists. Very few doctors of old school; nearly all doctors now enter the field as a business, productive of a livelihood. Majority of doctors die in poverty, and before ripe old age. Thinks only of the malady of patient; often a near-failure as to business methods of his office; and generally an unwise investor. Lack of business training dates back to his Alma Mater, which gave not a hint as to business application of scientific knowledge so generously offered.

3. A CASE OF CONGENITAL ANIRIDIA AS A FAMILIAR SEQUENCE.

WALTER S. FRANKLIN.
E. F. GLASER.

Mrs. ——, twenty-three years of age, double-sided aniridia, eyesight poor since childhood. Right eye shows opacities in lense and excavation of nerve-head. Left eye marked corneal opacities. Tension increased in both eyes; vision markedly reduced. Mother blind, grandfather blind, one sister confined in blind asylum in British Columbia (have not yet received notes on her case). Parents' two-year-old baby has double-sided aniridia.

4. REPORT OF AN UNUSUAL EAR CASE.

C. F. WELTY.

Cerebral complications always require the most careful consideration.

The differential diagnosis between brain abscess, meningitis and infectious sinus thrombosis are not easily made.

Again, there are other conditions that may arise during the course of an acute mastoiditis that may make such a diagnosis impossible. Therefore, everything should be done to clear the field, as a life hangs in the balance.

THURSDAY MORNING, 9:30 O'CLOCK.

1. LANTERN SLIDE EXHIBIT OF EYE CASES WITH COMMENTS ON DIAGNOSIS AND TREATMENT.

HANS BARKAN.

The pictures shown are of some rarer forms of eye and nervous lesions, and of a series of the more common eye affections; they are shown mainly to bring out discussion in treatment pursued by the members of section, it being the belief of writer that a discussion of various methods of treatment of the common ocular maladies might be of mutual benefit.

2. REPORT OF A CASE OF OTITIC MENINGITIS.

E. C. SEWALL.

Patient presented clear picture mastoid abscess. Streptococcus mucosus type. No discharge from the ear for three months and then questionable. Symptoms of meningitis. Spinal fluid under pressure, great increase in leucocytes in spinal fluid, polymorphonuclear type, nystagmus. Mastoid operation. Disappearance of nystagmus. The cell count at repeated daily examinations of spinal fluid showed steady decrease in cells; exitus. P. M. showed no evidence of path of infection to meninges. Histological examination of temporal bone.

3. A STUDY OF AUTO-SERO THERAPY IN CERTAIN EYE DISEASES.

W. F. BLAKE.
W. T. CUMMINGS.

Intravenous inoculations of animals with bacterial suspensions to determine any selective tendency toward infection of eye tissues.

A study of certain common eye lesions to determine if they are toxic or infectious in origin.

A study of use of auto serum,—subconjunctival injections—its apparent effect, and histological study of reactionary process in tissues of eye.

4. CLINICAL OBSERVATIONS OF CATARACT OPERATION.

JOHN J. SMITH.

This paper is a treatise on determining whether a preliminary iridectomy should be performed before attempting an extraction.

Careful consideration is given to a description of the conditions which may be present in the affected eye from which the writer draws his conclusions as to whether he will perform the ordinary cataract operation, the Hess operation, the Homer Smith operation, or the Smith-Indian operation.

Mention is made also of his success in treating immature cataracts by absorption methods.

THURSDAY AFTERNOON, 2:30 O'CLOCK.

1. THE INVISIBLE SPECTRUM AS AN OCULAR IRRITANT.

T. C. POUNDS.

The forms of radiant energy under discussion are found beyond the two extremes of the visible spectrum and consist principally of the infra-red, or dark heat rays, and the ultra-violet or chemical rays.

A brief consideration of their properties show them capable of affecting the tissues both superficially and by penetration, especially when the exposure is prolonged or excessive. These facts have been demonstrated experimentally and clinically. Many of the conditions of the eye due to exposure to light are analogous to those produced in the skin.

A comparison of the light from different sources—from the blue sky to incandescent tungsten—shows a variable content of these rays, the amount existing in the electric arc and the tungsten lamp being excessive. These rays play an important part in the production of that train of symptoms or rather conditions going to make up what is known as snow blindness, and a similar affection of the eyes, found in those recently exposed to tropical light, as well as the electric ophthalmia of varying degree which is being encountered with increasing frequency and which is really taking a place among the occupational diseases.

The fact that several cases of asthenopia met with during the past two or three years were not relieved entirely by the proper fitting of glasses but were ultimately remedied by the use of methods to reduce the amount of invisible rays entering the eye is fairly conclusive evidence of their harmful effects.

2. OTOSCLEROSIS.

M. W. FREDRICKS.

Grouping of several disease conditions under the same name. The importance of an exacter pathology, and importance of making a differential diagnosis between otosclerosis and similar conditions. Difficulty of obtaining and preparing anatomical specimens. Great length of time necessary properly to observe a case. Importance of recognizing the disease early in life, when it might still be amenable to treatment. Frequency of the disease, and economic necessity of finding some effective treatment. Role of heredity. Small value of methods of treatment that have so far been employed. Radium of no value except to kill the acoustic in cases of intolerable head-noises. Other drugs tried, and their value. Mechanical methods. X-ray treatment.

3. NOT RECEIVED.

C. M. HOSMER.

TUESDAY AFTERNOON, 2 O'CLOCK.

PROGRAM OF THE UROLOGICAL SECTION OF THE CALIFORNIA STATE MEDICAL SOCIETY.

1. SOME DERMATOLOGICAL CASE REPORTS.

THOMAS J. CLARK.

Mycosis Fungoides.
Acute Lichen Planus in a Negro.
Lichen Infantum.
Leprosy in Children.
Herpes Gestationis.
Chancre of the Tonsil Originating in a Dentist's Office.
Pemphigus Neonatorum.

Discussion opened by HOWARD MORROW.

2. PYELITIS OF PREGNANCY.

A. B. CECIL.

3. ETIOLOGY AND TREATMENT OF FREQUENCY OF URINATION IN WOMEN.

W. E. STEVENS.

4. CHAIRMAN'S ADDRESS.

V. G. VECKI.

WEDNESDAY MORNING, 9:30 O'CLOCK.

Election of Officers.

1. DYSURIA IN THE TABETIC.

T. L. HOWARD.

2. REPORT OF A CASE OF EXFOLIATIVE MEMBRANOUS CYSTITIS.

GRANVILLE MACGOWAN.

The condition a rare one—cause unknown—no symptoms distinctly diagnostic—most common in women in the puerperal state—motor powers of bladder always interfered with for a long time—cystoscopic picture—treatment pursued.

3. AN ANALYTICAL STUDY OF 47 PERINEAL PROSTATECTOMIES.

FRANK HINMAN.

THURSDAY MORNING, 10 O'CLOCK.

MOVING PICTURES OF SUPRAPUBIC PROSTATECTOMY.

W. B. DAKIN.

WEDNESDAY MORNING, 9:30 O'CLOCK.

PROGRAM OF THE SECTION ON OBSTETRICS AND GYNECOLOGY OF THE CALIFORNIA STATE MEDICAL SOCIETY.

1. CARE OF FUNCTIONING BREASTS.

FRANK C. AINLEY.

General and local preparation, during pregnancy, for nursing the baby. Importance of toughening rather than hardening the nipples.

The importance of regular, periodic stimulation in establishing a sufficient milk supply, and the objections to the usual meddlesome methods.

Methods of maintaining or increasing the milk supply.

Treatment of breast infections.

The rapid, safe, comfortable method of drying up maternal milk supply.

Discussion opened by GEO. LYMAN.

2. OBSTETRICAL ANESTHESIA.

CAROLINE PALMER.

1. Necessity for "Painless Childbirth."
2. Consideration of the use of drugs in the various stages of labor.

3. Consideration of the use of chloroform, ether and nitrous oxide and oxygen as to:
   (a) Duration of labor.
   (b) Interference.
   (c) Hemorrhage.
   (d) Laceration.
   (e) Safety to mother and child.
4. Management of abnormal cases:
   (a) Prolonged labor.
   (b) Forceps.
   (c) Minor operations.
   (d) Hemorrhage.
   (e) Eclampsia.
   (f) Cesarian section.
5. Technic of administering nitrous oxide and oxygen in normal obstetrics.
6. Case reports.
7. Conclusions.
8. Expense.
9. A suggested routine procedure.
10. Cooperation between Obstetrician and Anesthetist.
11. Obstetrical Anesthesia worthy of serious consideration.
12. Records.

3. BACKWARD DISPLACEMENT OF THE UTERUS.

THOS. A. BURGER.

Recent literature on this subject has been so prolific that this paper will be, to some extent, rather a review of trustworthy findings, making such applications as seem pertinent.

Anatomic conditions, especially, will be dealt with while posture or the orthopedic considerations will be enlarged upon, quoting the writings of Sturmdorf, Dickenson and others along with Goff's ideas in regard to location of cervix, if anchored to the front, determining which way the fundus locates itself from the cervix as a pivot.

With intra-abdominal pressure as the most important of all factors influencing the position of the fundus, the above considerations become only governing elements.

Pelvic pathology and lack of pelvic floor are undisputed factors in retropositions, although many retroposed uteri are not to be classed as pathological; and congenital (?) retropositions are in this latter class.

With end results as the greatest consideration, the determination of cases of prolapsed uteri where surgery is not indicated is a master gynecological problem.

Treatment will be considered from the standpoint of posture, exercise, pessary and surgery, with brief reason for choice of each in selective cases.

4. EMPHYSEMA COMPLICATING LABOR WITH REPORT OF CASE.

DUDLEY SMITH.

A rare complication of labor. An emphysema of the mediastinum extending to the subcutaneous tissues of neck and head; less than a hundred cases in the literature. Radiographs of the chest tend to confirm the presumption that the condition was of tuberculous origin.

WEDNESDAY AFTERNOON, 2:30 O'CLOCK.

1. ELECTION OF OFFICERS.

2. VESICO-VAGINAL FISTULAE.

C. P. THOMAS.

Deals particularly with surgical causative factors, especially complicating hysterectomy and the Percy operation on cancer of the uterus.

Gives methods of differentiation between uretero and vesicovaginal fistulae. Also outlines methods of detecting the very small fistula.

Describes method of encouraging spontaneous cure, and prevention of fistulae where operations have injured the bladder walls.

Outlines primary and secondary operation for fistula, describing minutely the methods and suture material for both the primary and secondary operations.

Summary of the paper outlines the following requirements:

1. A good light and exposure of the opening. When the uterus has been removed, this latter is not always an easy matter.
2. Thorough denudation.
3. Careful coaptation without tension of the denuded surfaces.
4. Correct placing of the proper suture material.
5. Rest in bed three weeks, with a self-retaining catheter two weeks, which catheter must be kept clean.

Discussion opened by H. P. NEWMAN.

3. SYMPOSIUM ON CYSTOCELE.

(a) H. P. NEWMAN.
(b) J. CRAIG NEEL.

H. P. NEWMAN.

New Method of Plastic Surgery in Extensive Tears and Hernial Conditions of the Female Bladder and Urethra, With Report of Two Unusual Cases.

(Illustrated by lantern slides.)

Restoration of the female bladder in extensive tears with hernial conditions or in exstrophy of these organs, requires most painstaking, plastic surgery, especially in those cases where the urethra is involved or where some means of controlling the flow of urine must be devised. Individual methods must be adapted to individual cases and the operation itself as well as the after-treatment demands exact and discriminating care.

In the cases reported these considerations are exemplified and a contribution to the technique offered.

Discussion opened by GEO. B. SOMERS.

J. CRAIG NEEL.

Anterior Vaginal Relaxation With Especial Reference to Urinary Incontinence.

The importance of the urogenital triganum as a support for the pelvic viscera has not been sufficiently emphasized. While uterine prolapse may occur in nulliparous women, extensive anterior vaginal relaxation with marked cystocele is almost invariably due to injuries associated with child-birth.

That the development of cystocele is a gradual process and is due to a relaxation of the endopelvic fascia and not to a laceration as is generally supposed, is readily demonstrated at the time of operation since this fascia forms a strong layer of tissue between the original mucosa on one side and the bladder wall on the other.

The importance of having the bladder emptied to allow the head to enter the pelvis has long since been recognized. The neglect of this procedure not only prolongs the labor, but allows strong pressure to be put upon the anterior vaginal wall and thus, by overstretching the fibers, decreases the efficiency of this fascial diaphragm. When the fascial support is once damaged, the bladder descends to form a hernia, which is more commonly known as cystocele. If the internal urethral sphincter is sufficiently disturbed, urinary incontinence results which may not only be the most troublesome symptom, but at the same time may be the most difficult one to relieve.

The chief symptoms of anterior vaginal relaxation usually appear about the menopause and are: irritability of the bladder, pelvic tenesmus, and incontinence of urine, especially on slight exertion, and inability to empty the bladder.

The treatment is operative. When urinary incontinence is complained of, the best results are obtained by tightening the internal urethral sphincter after the method described by Kelly.

The treatment of the cystocele is similar to the treatment of hernia in other parts of the body. A transverse incision is made over the cervix extending through the vaginal mucosa and underlying fascia; the mucosa and fascia are then separated from the bladder from below upwards to the region of the internal urethral sphincter; a median incision is made through these layers which are dissected laterally to the pubic bones; the bladder is next reduced to its normal position; the fascia is separated from the mucosa and imbricated by mattress sutures; the excess of mucosa is then removed and the cut edges approximated by a continuous suture.

If the dissection is made in the proper layers, there is practically no bleeding and the results have been most satisfactory.

NOTE:—This paper will be illustrated by lantern slides, showing the pelvic fascia, and steps of the operation.

THURSDAY AFTERNOON, 2 O'CLOCK.

PROGRAM OF THE NEUROLOGICAL SECTION OF THE CALIFORNIA STATE MEDICAL SOCIETY.

1. SPINAL CORD CHANGES IN COMBINED SCLEROSIS.

WALTER SCHALLER.

Based on a consideration of the pathology in four cases of Combined Sclerosis microscopically examined, the cord symptoms of this disease are explained and the diagnosis of the condition discussed in a review of a number of additional cases seen clinically. Cord sections and certain clinical symptoms are illustrated by lantern slides.

Discussion opened by J. T. FISHER.

2. A DISCUSSION OF THE FAILURE OF ABDOMINAL SURGERY AND OTHER COMMON THERAPEUTIC AGENTS TO RELIEVE PAIN AND THE OTHER SYMPTOMS OF DISEASE OF THE VEGETATIVE NERVOUS SYSTEM.

T. J. ORBISON.

3. SYMPTOMATIC PSYCHOSES.

C. L. ALLEN.

4. STUDY AND CHARTING OF PERSONALITY.

V. H. PODSTATA.

The author seeks to systematize the study of Endow-

ments, Capacities and Traits of personality and to record them graphically by means of charts.

His first object is to aid in the early recognition of deviations towards abnormal reaction types, the second to establish more definitely the influence of heredity and acquired causes upon the molding of personality.

Various abnormal types of personality are presented by the author by means of his charts.

His studies have been made both on children and adults.

5. REPORT OF A CASE OF AMAUROTIC FAMILY IDIOCY (TAYLOR SACHS DISEASE), THIRD CASE IN SAME FAMILY AFTER A LAPSE OF SIXTEEN YEARS.

CARL W. RAND.

Reference to Warren Tay's original article (1881), with a quotation of his original descripton of the eye-grounds.

Reference to B. Sachs' pioneer work and the symptom-complex which he considered as pathognomic of the disease.

A few words regarding the clinical and pathological aspects of the disease. Complete lists of contributors to the subject, with bibliography attached at end of report.

Description of the author's case, together with a history of a similar illness in three preceding members of the same family. Physical findings on examination of patient; description of the ophthalmoscopic findings; laboratory reports.

Entire report will take 10 to 12 minutes to read.

Discussion opened by ROSS MOORE J. MAST WOLFSOHN.

OFFICERS, 1916-17.

GEORGE H. KRESS, Los Angeles, President.
L. R. WILLSON, Fresno, First Vice-President.
JNO. C. YATES, San Diego, Second Vice-President.
SAXTON T. POPE, Butler Building, San Francisco, Secretary.

COUNCILORS.

Term expires 1917: E. N. EWER, Oakland, 7th District; A. W. HOISHOLT, Napa, 9th District; A. C. A. JAYET, San Jose, 5th District; RENÉ BINE, San Francisco, at large.

Term expires 1918: T. C. EDWARDS, Salinas, 3rd District; GEORGE H. AIKEN, Fresno, 4th District; H. A. L. RYFKOGEL, San Francisco, at large; C. VAN ZWALENBURG, Riverside, 1st District.

Term expires 1919: C. G. KENYON, San Francisco (Chairman), 6th District; E. C. MOORE, Los Angeles, 2d District; JAS. H. PARKINSON, Sacramento, 8th District; O. D. HAMLIN, Oakland, at large.

PERSONNEL OF THE HOUSE OF DELEGATES.

I. EX-OFFICIO.

The President, GEORGE H. KRESS.

II. COUNTY SOCIETY DELEGATES.

DELEGATES.	ALTERNATES.
Alameda.	
G. G. Reinle (1)	T. C. McCleave (1)
A. S. Kelly (1)	Alvin Powell (1)
E. E. Brinckerhoff (2)	W. A. Clark (2)
L. P. Adams (2)	Dudley Smith (2)
Butte.	
D. H. Moulton (1)	N. T. Enloe (1)
Contra Costa.	
P. C. Campbell (2)	W. S. Abbott (2)
Fresno.	
A. B. McConnell (1)	J. R. Walker (1)
J. H. Pettis (1)	
Glenn.	
Humboldt.	
John N. Chain (2)	Louis P. Dornis (2)
Imperial.	
Kern.	
F. A. Hamlin (1)	J. P. Hull (2)
T. F. Smith (1)	
F. J. Gundry (2)	
Lassen-Plumas.	
Los Angeles.	
A. B. Cooke (1)	Titian J. Coffey (1)
H. Bert Ellis (1)	O. O. Witherbee (1)
W. H. Kiger (1)	J. L. Pomeroy (1)
Wm. M. Lewis (1)	H. G. Marxmiller (1)
Chas. D. Lockwood (1)	Irving Bancroft (1)
Granville MacGowan (1)	A. F. Maisch (1)
Thos. J. McCoy (1)	Charles Phillips (1)
F. C. E. Mattison (1)	H. A. Rosenkranz (1)
F. M. Pottenger (1)	Francis L. Anton (1)
Albert Soiland (1)	William Wenzlick (1)
R. B. Sweet (1)	Joseph M. King (1)
C. P. Thomas	A. S. Granger (1)
(Los Angeles—Continued.)	
Chas. H. Whitman (1)	Ross Moore
Stanley P. Black (2)	F. A. Speik
Chas. C. Browning (2)	Edgar Allen
George A. Fielding (2)	Clarence Toland
Wm. R. Molony (2)	A. J. Herrmann
C. H. Montgomery (2)	
E. A. Newton (2)	
L. M. Powers (2)	
Harlan Shoemaker (2)	
V. R. Townsend (2)	
Thomas J. Orbison (2)	
William Duffield (1)	
F. W. Thomas (1)	
J. M. Wilson (1)	
H. M. Voorhees (2)	
Marin.	
J. H. Kuser (2)	W. F. Jones (2)
Mendocino.	
O. H. Beckman (1)	L. C. Gregory (1)
Merced.	
B. Davis (1)	J. L. Mudd (1)
Monterey.	
H. N. Yates	Garth Parker
Napa.	
Orange.	
C. D. Ball (1)	
H. A. Johnston (1)	
Placer.	
J. G. MacKay (1)	G. H. Fay (1)
Riverside.	
H. R. Martin (1)	
J. C. King (1)	
Sacramento.	
S. E. Simmons (1)	E. W. Twitchell (1)
T. J. Cox (1)	J. B. Harris (1)
F. F. Gundrum (1)	C. B. Jones (1)
San Benito.	
L. C. Hull (1)	

DELEGATES.	ALTERNATES.
San Bernardino.	
G. G. Moseley	D. C. Strong
San Diego.	
San Francisco.	
H. W. Allen (1)	T. Addison (1)
J. H. Barbat (1)	E. W. Alexander (1)
W. F. Blake (1)	W. Baldwin (1)
R. G. Brodrick (1)	G. M. Barrett (1)
J. B. Frankheimer (1)	S. Beasley (1)
Herbert Gunn (1)	S. Blum (1)
W. W. Kerr (1)	W. W. Boardman (1)
C. G. Levison (1)	Jos. R. Brown (1)
A. A. O'Neill (1)	E. D. Chipman (1)
W. Ophuls (1)	E. C. Dickson (1)
S. Stillman (1)	Jas. Eaves (1)
C. F. Welty (1)	F. R. Girard (1)
H. E. Alderson (2)	A. W. Hewlett (1)
P. K. Brown (2)	V. H. Hulen (1)
F. B. Carpenter (2)	W. P. Lucas (1)
W. B. Coffey (2)	G. D. Lyman (1)
G. E. Ebright (2)	F. W. Lynch (1)
H. W. Gibbons (2)	L. S. Mace (1)
J. H. Graves (2)	M. Molony (1)
H. C. Moffitt (2)	J. H. O'Connor (1)
E. Rixford (2)	C. A. Pauson (1)
A. B. Spalding (2)	C. J. Teass (1)
F. D. Tait (2)	J. T. Watkins (1)
V. G. Vecki (2)	F. H. Zumwalt (1)
San Joaquin.	
J. D. Dameron	L. Dozier (1)
C. R. Harry (2)	D. R. Powell (1)
B. J. Powell (2)	W. J. Young (1)
San Luis Obispo.	
A. H. Wilmar (1)	G. L. Sobey (1)
San Mateo.	
Santa Barbara.	
W. H. Campbell (2)	C. S. Stevens (2)
Santa Clara.	
Chas. M. Richards (1)	
N. H. Bullock (1)	
Paul Sanford (2)	
Santa Cruz.	
P. T. Phillips (1)	F. H. Koepke (1)
Shasta.	
F. Stabel (1)	E. Dozier (1)
C. E. Reed (1)	J. P. Sandholdt (1)
Siskiyou.	
Solano.	
Sonoma.	
Frank E. Sohler (1)	J. W. Seawell (2)
F. O. Pryor (2)	J. T. O'Brien (2)
Stanislaus.	
P. N. Jacobson (2)	B. F. Surrhyne (2)
Tehama.	
Tulare.	
W. W. Tourtillott (2)	T. D. Blodgett (2)
Tuolumne.	
Ventura.	
Yolo.	
H. D. Lawhead (1)	M. W. Ward (1)
Yuba-Sutter.	

Society Reports

CONTRA COSTA COUNTY.

The regular monthly meeting of the Contra Costa County Medical Society was held in the Abbott Emergency Hospital, Richmond, on Saturday evening, February 24, at which time Dr. P. C. Campbell, President of the Society, was elected delegate to the State convention at Coronado. Dr. U. S. Abbott, Secretary of the Society, was elected alternate.

Dr. Edwin E. Johnson of Concord, Dr. M. Deininger-Keser of Richmond, Dr. W. W. Fraser of Richmond, and Dr. Hall Vestal of Richmond were elected to membership, making a total membership for 1917 of twenty-five.

After the business meeting Dr. H. D'Arcy Power of San Francisco gave a very interesting and instructive talk on "Importance and Methods of Diagnosis."

There was a lively discussion among the members regarding the different medical health laws about to be passed by the Legislature.

Those present at the meeting were: Drs. P. C. Campbell, H. L. Carpenter, E. W. Cunningham, C. L. Abbott, F. S. Cook, Edwin E. Johnson, Hall Vestal, M. Deininger-Keser, W. W. Frazer, E. W. O'Brien and T. A. Guthrie (dentists).

At the close of the meeting a Dutch luncheon was served.

Regular monthly meetings are held on the fourth Saturday nights of each month.

U. S. ABBOTT, Secretary.

LOS ANGELES COUNTY MEDICAL ASSOCIATION.

The annual meeting of the Eye and Ear Section, Los Angeles County Medical Association, was held at the offices of Drs. Fleming, Hastings, and Montgomery, 924 Trust and Savings Building, Los Angeles, Cal., January 8, 1917.

Attendance—Drs. Bullard, Dudley, Detling, Griffith, Hastings, Kyle, Lund, R. W. Miller, McKellar, Montgomery, Oldham, Old, F. L. Rogers, Stivers, Sweet, True, Kelsey.

Visitors—Drs. Sleeper and Jesberg.

Minutes of the previous meeting read and approved.

The annual report of the Secretary and Treasurer was read and Dr. True moved that Dr. McKellar be allowed to pay his dues. Seconded by Dr. Bullard. Dr. Hastings moved that the Secretary and Treasurer's report be accepted. Seconded by Dr. Bullard and carried.

The Nominating Committee suggested the names of Dr. George W. McCoy (chairman), Dr. Frank Detling (vice-chairman), Dr. C. G. Stivers (secretary-treasurer) and Dr. C. H. Montgomery (councillor).

Dr. Hastings moved the nominations be closed. Seconded by Dr. Bullard.

Dr. R. W. Miller moved that the Secretary cast a ballot for the candidates. Seconded by Dr. Bullard. Accordingly the secretary cast one ballot and Dr. George W. McCoy as chairman, Dr. Frank Detling as vice-chairman, Dr. C. G. Stivers secretary-treasurer and Dr. C. H. Montgomery as councillor were declared elected.

Dr. Hastings suggested that the Secretary mail to each member some printed cards for reporting all cases of deaths.

Roll call.

Dr. Dudley reported two cases. Dr. Griffith one case. Dr. R. W. Miller two cases, both mastoids, intra-cranial, and meningitis and saw third case in consultation. Case of purulent meningitis following tonsillectomy. Dr. Montgomery four cases.

Discussion (first case) Dr. G. Lund: Could not the infection have occurred from some other source than family physician's manipulation?

Dr. Montgomery: Perhaps, but not likely.

Second case of Vincent's angina. Third case of meningitis. Fourth case of mastoid.

Discussion (fourth case): How was the speech?

Answer: That is hard to answer, but I think it was normal. She answered her parents in monosyllables.

Dr. Rogers of Long Beach: Was the ventricle open?

Answer: No.

Dr. Miller: Was there any specific infection?

Answer: No.

Dr. Kyle: Patient seemed to show some symptoms of cerebellar abscess.

The Secretary requested all members to pay their dues by check.

Dr. Dudley moved to adjourn and to continue reports at the next meeting.

The regular meeting of the Eye and Ear Section of the Los Angeles County Medical Association was held at the offices of Drs. H. B. Ellis and George H. Kress, 245 Bradbury Building, Los Angeles, Cal., February 5, 1917.

Attendance—Drs. Brown, Dudley, Detling, Ellis, Graham, Leffler, Lund, F. W. Miller, R. W. Miller, Oldham, Old, Stivers, Sweet, True.

Visitors—Drs. Sleeper, Jesberg, McKellar, Duncan.

Minutes of the annual meeting read and approved.

On roll call Dr. Stivers reported a fatal case of tuberculosis of the larynx. Dr. Sweet reported case of Sarcoma of tonsil in which Autolysin was used. Patient was 58 years of age; both tonsils were Sarcomatous.

Dr. Brown reported the following cases: First, mastoid; second, brain abscess; third, nasal hemorrhage; fourth, frontal sinus; fifth, mastoid.

Dr. Detling reported a mastoid case, the man was a diabetic had Betzold type abscess. The mastoid wound did not heal well, temperature fluctuated. After death the mastoid opened, lateral sinus exposed containing purulent clot. Temperature was not characteristic of sinus infection.

Question (Dr. True): Cause of nasal hemorrhage?

Answer (Dr. Brown): Rupture of hardened artery.

Dr. R. W. Miller reported two cases both mastoids.

The Secretary read the application of Dr. J. H. McKellar. Dr. Dudley moved that the section recommend the application of Dr. McKellar without further action. Dr. Ellis moved the by-laws be suspended in Dr. McKellar's case. Seconded by Dr. True. Carried.

On the original motion of Dr. Dudley the section voted to recommend Dr. McKellar's application.

Dr. Rex Duncan read his paper, "The Use of Radium in Diseases of the Eye, Ear, Nose and Throat." Illustrated with lantern slides.

After free discussion the meeting adjourned.

C. G. STIVERS, Secretary.

SACRAMENTO SOCIETY.

The regular monthly meeting of the Sacramento Society for Medical Improvement was held February 20, 1917, at the Hotel Sacramento, the President, Dr. C. B. Jones, presiding. The following program was presented:

1. The Aim of St. Luke's Group Study and Its Methods. Illustrated by lantern slides. Dr. F. W. Birtch, San Francisco.
2. A Discussion of the Urologic Cases from the Diagnostic Section. Material from 300 cases. Dr. H. Partridge, San Fracisco.
3. The Interpretation of the Phenolsulphonephthalein Test. Material from 300 cases. Dr. R. B. Tupper, San Francisco.
4. A Discussion of the Neurological Findings Discovered by Routine Examination in Three Hundred Cases. Dr. T. G. Inman, San Francisco.

Discussion of the papers was opened by Dr. E. V. Knapp of San Francisco, followed by Dr. E. T. Rulison, Dr. N. G. Hale, Dr. J. W. Crawford, Dr. F. F. Gundrum, Dr. E. H. Pitts. Discussion closed by Dr. Birtch and Dr. Partridge.

Dr. A. D. Elsworth was elected to membership. Monthly report of the Board of Directors read.

Meeting adjourned at 11:30 p. m.

W. A. BEATTIE, Secretary.

PROCEEDINGS OF THE SAN FRANCISCO COUNTY MEDICAL SOCIETY.

During the month of February, 1917, the following meetings were held:

Tuesday, February 6—Section on Medicine.

Symposium of Group Study by Members of St. Luke's Diagnostic Section.

1. The Aim of Group Study and Its Methods Illustrated. E. V. Knapp.
2. The Handicap Found in the Tuberculous Cases Due to Concomitant Diseases (From 300 cases investigated). R. L. Ochsner.
3. The Explanation of Dyspeptic Symptoms (From the records of the Diagnostic Section). Wm. Kenney.
4. Discussion of the Orthopedic Cases Noted by Routine Examination in Group Study. G. J. McChesney.

Tuesday, February 13—General Meeting.

1. Etiology and Treatment of Cystocele. J. C. Neel.
2. Some Observations on Bacillus Dysenteriae in California. K. F. Meyer.
3. The Colloidal Gold (Lange) Test in Diagnosis. R. W. Harvey.

Tuesday, February 20—Section on Surgery.

1. Study of Exophthalmic Goiter of Various Types; Presentation of Cases. C. G. Levison.
2. The Chemistry of the Thyroid Gland. Alice Rhode.

Tuesday, February 27—Section on Eye, Ear, Nose and Throat.

1. Presentation of Eye Cases.
   W. F. Blake:
   (a) Keratoconus.
   (b) Marked arteriosclerosis with horizontal hemianopsia.
   (c) Hemorrhage in left eye; possibly tuberculous.
   (d) Piece of metal nearly 1 cm. in diameter and 3 mm. thick extracted from eye.
   (e) Separation of retina.
   (f) Two cases of vitreous opacities in individuals suspected of being tuberculous.
   (g) Proptosis; mild degree of oxycephaly.
   E. F. Glaser:
   (a) Keratoconus.
   (b) Albinism.
   W. S. Franklin:
   Lateral luxation of lens.
2. Brief Sketch of Recent Work in the Neuro-otological Field. F. C. Lewitt.
3. Report of Two Cases of Foreign Bodies in Bronchus. Saxton Pope.
4. Problem of Advanced Strictures of the Esophagus. Henry Horn.

REPORT OF THE COMMITTEE ON COMPULSORY HEALTH INSURANCE OF THE SAN FRANCISCO COUNTY MEDICAL SOCIETY.

Following is the report of the Committee on Health Insurance of the San Francisco County Medical Society. The report has not yet been presented to the Society, but is herewith published because of the great interest in the question.

The proponents of compulsory health insurance have not, as yet presented any plan that your committee can endorse. It is certain, moreover, that the need of such legislation is less urgent in California than in many other States, and that for this reason California can well afford to delay such legislation until it effects in other states have been observed and studied.

The proposed legislation is of vital interest to the medical profession. About two-thirds of the total population would probably be insured against illness; and the supervision of and remuneration for this vast amount of medical service would be controlled by the state. Such a radical alteration in the conditions surrounding medical service can not be accomplished without conflicts between the state authorities and the insurance carriers on

the one hand, and the medical profession on the other; and conflicts between these two forces have occurred in almost every country where compulsory health insurance has been adopted. It is therefore imperative that the medical profession study carefully the problems that may arise, in order that it may guard its interests should such legislation be proposed or adopted.

The proposed plans guarantee two types of benefit to the insured in the event of illness. First, a cash benefit amounting to a certain proportion of his previous income; and second, medical care, which includes the services of a physician or of physicians, drugs, mechanical appliances and, if need be, hospital care. Your committee is unable to suggest any method whereby insurance carriers can furnish medical care without serious objections on the part of many physicians. In the first place, it is not certain that the total sum received by the profession under the proposed change would equal that which it now receives from the same classes of patients. Even though we assume for the sake of argument that the total sum will equal or will even exceed what is now received, it will be distributed differently, for the new distribution will be more or less controlled by the state and by the insurance carriers. The transition to this new set of conditions would undoubtedly work a hardship to many in the profession. It may be argued that under state control the selection of physicians would be more just than under the system of absolutely free choice now in force. This might be true under ideal conditions of governmental control; but the experiences of the past, particularly with respect to medical licensure, antivivisection laws, and industrial accident insurance, does not inspire the profession with confidence in the state control of medicine. Should at some time this control fall into the hands of those out of sympathy with the profession or should it be used for the promotion of political purposes, then a large part of the profession would find itself at the mercy of an unjust or corrupt central control. And in the end such a condition could not fail to lessen the standard of medical service rendered to the community as a whole.

Your committee therefore feels that from the standpoint of the medical profession it can endorse compulsory health insurance only in so far as it provides a cash benefit for the insured in the event of illness. If medical care were not provided this cash benefit could be greater than it would be otherwise. Under such a plan the patient would receive a cash benefit but the relations between patients and their physicians would remain as they now are. The committee realizes that this plan will not satisfy many who are at present advocating compulsory health insurance, for the reason that under this plan the sick benefits would often be insufficient to meet the expenses of illness. Nevertheless, the committee believes that the medical profession would prefer to follow its present custom of minimal charges in such cases rather than risk the uncertainties of state control together with an alteration in the personal relation that now exists between physician and patient.

Book Reviews

Clinical and Laboratory Technic. By H. L. McNeil. Illustrated. St. Louis: Mosby. 1916.

This little volume is the lamentable result of attempting too great a condensation of technical methods. It is a mere smattering and enumeration of the tests and methods employed rather than a description and interpretation. This book is so close to the quiz-compend type that it cannot be recommended as of the slightest practical value.
G. H. T.

Care of Patients Undergoing Gynecologic and Abdominal Procedures, Before, During, and After Operation. By E. E. Montgomery, M. D., Professor of Gynecology in Jefferson Medical College, Philadelphia. 12mo of 149 pages with 61 illustrations. Philadelphia and London: W. B. Saunders Company. 1916. Cloth, $1.25 net.

This little book is the outgrowth, the author says, of some typewritten instructions prepared for his assistants. It consists of a chapter on preparations for laparotomy and a discussion of possible complications, and following, of short descriptions of the technique of the various gynecological and of a few other abdominal operations. The explanations are short, but should be sufficient for nurses assisting in the operating room; they are entirely sensible, and no nurse will go amiss in following them.
L. E.

Cancer, Its Cause and Treatment. By L. Duncan Bulkley, A. M., M. D. New York: Paul B. Hoeber. 1915. Price, $1.50.

In this book Bulkley seeks to develop the theory that cancer is a constitutional disease whose incidence seems to follow closely along the lines of modern civilization He thinks that this extension of cancer depends largely upon the altered conditions of life, particularly upon self-indulgence in eating, drinking and indolence. He considers the increase in the consumption of meat, alcohol and coffee, together with the increased nerve-strain, acting through a disturbance of metabolism as well as directly on the morbid cell itself to be of importance. He thinks that the institution of dietetic, hygienic and medicinal measures may offer some curative and much prophylactic promise.
L. E.

An Inquiry into the Principles of Treatment of Broken Limbs; a Philosophico-Surgical Essay with Surgical Notes. By William F. Fluhrer. M. D. New York: Rebman Co. 1916.

This high-sounding title designates an essay advocating the treatment of fractures of the lower extremity by means of a fixation apparatus made of tin strips and plaster of paris bandages. The method was evolved in the '70's—and the book belongs to the '70's. Many of its principles are incorrect, but the treatise gives a number of useful hints in bandaging—a heritage from the days when bandaging was an art, and a slovenly dressing an opprobrium. Besides the essay on fractures it contains a chapter on the open treatment of amputations that is full of good suggestions, notes on sepsis in the New York hospitals in the '70's, and a chapter describing some bone instruments of the author's invention. The book is smothered in philosophical verbiage, but is interesting historically.
L. E.

The Practical Medicine Series. Comprising ten volumes on the year's progress in medicine and surgery. Under the general editorial charge of Chas. L. Mix, A. M., M. D. Chicago: Yearbook publishers. 1916.

Obstetrics. Vol. 7. Edited by J. B. DeLee and H. M. Stowe. Price, $1.35. Contents: Pregnancy. Labor. Puerperium. New-born. Obstetrics in general.

Materia Medica and Therapeutics. Preventive Medicine. Vol. 8. Edited by Geo. F. Butler and W. A. Evans. Price, $1.50. Contents: Drugs, extracts of animal organs, bacterial preparations, serums and vaccines. Electricity, Roentgen rays, radium and radio-active substances. Physician and public health work. General sanitation. Personal hygiene. Infant welfare. Inspection of school

children. Infectious and contagious diseases. Occupational diseases. Military hygiene.

Skin and Venereal Diseases. Vol. 9. Edited by O. S. Ormsby and J. H. Mitchell. Price, $1.35. Contents: Dermatosis, Genito-urinary Diseases, Syphilis.

Nervous and Mental Diseases. Vol. 10. Edited by H. T. Patrick, P. Bassoe and L. J. Pollock. Price, $1.35. Contents: Symptomatology. Neuroses. Cerebrospinal fluid and diseases of the meninges. Syphilitic diseases of nervous system. Diseases of the brain. Diseases of the spinal cord. Diseases of peripheral nerves. Miscellaneous. Psychiatry: general considerations. Alcoholism, etc. L. M.

Bone-Graft Surgery. By Fred H. Albee, M. D., F. A. C. S., Professor of Orthopedic Surgery at the New York Post-Graduate Medical School and the University of Vermont. Octavo volume of 417 pages with 332 illustrations, three of them in colors. Philadelphia and London: W. B. Saunders Company, 1915. Cloth, $6.00 net; half morocco, $7.50 net.

We would advise those of our readers who practice bone surgery, either as orthopedists or as part of a broader specialty, to make themselves acquainted with the contents of this book.

The author attempts to apply the autogenous bone inlay to very nearly every problem presented by bone surgery; and in doing so displays mechanical ingenuity and an often truly exquisite technic. However, every now and then he offers solutions to some problems which might be come at by some technically simpler means.

We do not expect to follow him in all that he proposes; nevertheless the principle of the autogenous bone-graft is essentially sound, and must be regarded as a permanent addition to bone surgery.

Dr. Albee's great service to the profession lies in the fact that he has worked out the technic, assembled the proper armamentarium, determined many of the indications for the operation where it is applicable, and by his writings may be said to have popularized the autogenous bone-graft.

The chapter on the operative treatment of fractures is alone worth the price of the book.

J. T. W.

The Surgical Clinics of Chicago, Volume 1 No. 1 (February, 1917). Octavo of 221 pages, 83 illustrations. Philadelphia and London: W. B. Saunders Company. 1917. Published bi-monthly. Price per year: Paper, $10; cloth, $14.

Clinic of Dr. A. D. Bevan:

Gall-stone disease.

General principles of the operative cure of inguinal, femoral, and diaphragmatic hernias. Demonstration of three cases.

Clinic of Dr. A. J. Ochsner:

Goiter.

Case of femoral hernia.

Gernias in children.

Clinic of Dr. E. W. Andrews:

Fracture of patella treated by open operation.

Three cases of plastic surgery.

Contribution by Dr. L. L. McArthur:

Improvement in the technic of gastric surgery.

Clinic of Dr. D. D. Lewis:

Neurolysis and nerve suture.

Bleeding nipple, with plastic operation upon breast.

Congenital pyloric stenosis.

Clinic of Dr. Carl Beck:

Open wound treatment of acute and chronic bone and joint infections.

New treatment of large cavities after empyema of the chest.

Clinic of Dr. Allen B. Kanavel:

Transplantation of fascia lata in exstrophy of the bladder, complete defects in abdominal wall and spina bifida.

Clinic of Dr. D. N. Eisendrath:

Head injuries.

Carcinomatous ulcer on posterior wall of stomach with perforation into lesser peritoneal cavity.

Clinic of Dr. Kellogg Speed:

Tendoplasty for wrist-drop. Description of new operation.

Clinic of Dr. Samuel C. Plummer:

Case of calculous anuria.

Clinic of Dr. Edwin W. Ryerson:

Ankylosis of elbow.

Clinic of Dr. D. B. Phemister:

Echinococcus cyst of liver complicated later by subphrenic pyopneumothorax and hydropneuthorax.

Central fibroma of mandible.

Manual of Therapeutic Exercise and Massage: Designed for the use of physicians, students and masseurs. By C. Hermann Bucholz, M. D. Illustrated with 89 engravings. Philadelphia and New York: Lea & Febiger. 1917. Price, $3.25.

In these days when the irregular practice of psychotherapy flourishes under the guise of isms, cults and pseudo religions, it behooves the medical man to analyze his deficiencies and attempt to remedy as many of them as possible. The more reason for this, because many of these methods of relieving the sick rest on sound medical or surgical basis and are the more potent in the charlatans' hands for this very reason. How many medical men can say that they can or do intelligently make use of hydrotherapy, electrotherapy, massage, gymnastics? Not many. We are too prone to allow these valuable therapeutic measures to become the special province of a very few medical enthusiasts or to be lost to the field of legitimate medicine by their misuse or abuse in the hands of the quacks and cultists.

In the medical schools, therapy, aside from sera, drugs and surgical procedures is hardly ever referred to, much less taught. It is only when the student goes out into practice that he becomes aware of the additions that he can make to his armamentarium, but it is usually too late for him to take up any of these things beyond a mere recognition of them and a very few of their possibilities.

There is undoubtedly some virtue to the mechanical side of osteopathy, chiropractic and the other man-handling systems beyond the psychic effect on the patient. Massage, as used by the Japanese, the Indians and as developed and used in the Swedish practice are all recognized and legitimate means of therapeutic treatment. It devolves upon the practitioner of medicine of the regular school to investigate these things and to employ that which he may find good.

Rarely there appears an authentic work from a reliable source on hydrotherapy, electrotherapy and the mechanotherapeutic measures. When such appears, we should avail ourselves of their lessons, so that we can have knowledge of new and additional ways to treat patients and that we may apply, in a scientific way, to our patients those kinds of treatment that will be of use as supplements or as substitutes for other more familiar forms of treatment.

With the above points in mind, it gives the reviewer great pleasure to introduce to the notice of the profession a most authentic, comprehensive and illuminating work from the pen of one who can speak authoritatively on the subject of exercise and massage.

The ground covered includes all the various types of massage, active and passive movements, treatment with hot-air apparatus, heliotherapy, hydrotherapy, and the Bier method of hyperemia. After a complete and remarkably clear discussion of these therapeutic means, the various applications of these remedies and a good exposition of the pathology of the various affections treated are

presented to the reader in a concise, yet thorough manner. The conditions studied at length comprise: Stiffness of joints, fractures and dislocations, arthritis, subacrominal bursitis, lumbo-sacral and sacro-iliac affections, faulty posture, lateral curvature, affections of the foot, paralyses and ataxia, painful affections, neuroses, affections of the circulatory organs, respiratory organs, abdominal organs, and treatment of constitutional diseases and convalescence and debility. There is not a chapter where the reader cannot pick up one or more of those practical points that render the medical man's services more grateful to his patient and, therefore, the more satisfactory to himself. The illustrations are particularly fine photographs, admirably supplementing the text. G. H. T.

THE MARCH MEETING OF THE STATE BOARD OF HEALTH.

The regular monthly meeting of the State Board of Health was held in Sacramento on March 3, 1917. The following members were present: Drs. George E. Ebright, president; Fred F. Gundrum, Edward F. Glaser, Adelaide Brown, Robert A. Peers, and Wilbur A. Sawyer.

The Board endorsed Senate Bill No. 599 providing for physical education in the schools.

The typhus fever regulations for railroads, effective October 7, 1916, for detention camps for newly arrived Mexican laborers and for the weekly delousing of all section camps employing Mexican peons, were abolished as these precautions were no longer needed. The government had increased the precautions at the Mexican border and the disease had apparently been checked in California.

The action of the secretary in placing Siskiyou County under quarantine for rabies on February 23, 1917, was approved.

The following rule relative to the segregation and transportation of lepers was adopted:

No leper shall be transported, or encouraged to go from one county to another, or to a foreign country, without previous permission being obtained from the State Board of Health; and the escape of any leper from the isolation provided in accordance with Section 2952 of the Political Code shall be reported at once to the State Board of Health.

The resignation of Dr. J. C. Geiger, Assistant Director of the Bureau of Communicable Diseases, was received and accepted to take effect on April 24, 1917, as requested by him.

Fifteen additional beds in the men's ward of the tuberculosis department of the San Francisco Hospital, having been inspected and found to meet the requirements of the Board, were placed on the eligible list to receive the State tuberculosis subsidy.

Announcement was made that the statute providing for the payment of the State tuberculosis subsidy had been upheld as constitutional by the Third District Court of Appeal in its decision handed down March 1, 1917, in the test case of the County of Sacramento versus John S. Chambers, Controller.

Two nurses were granted certificates as registered nurses through reciprocity. A special committee of examiners was appointed for the examination of certification as registered nurse to be held April 18 and 19, 1917.

Miss Anna C. Jammé, Director of the Bureau of Registration of Nurses, was delegated to represent the Board at the annual meeting of the American Nurses' Association in Philadelphia, April 25 to May 3, 1917.

Thirty-four Nurses' Training Schools were placed on the list of accredited schools.

A temporary appointment as special investigator in the Bureau of Tuberculosis was authorized for the purpose of studying the prevalence of tuberculosis in certain industries.

Permits to supply water for domestic purposes were granted to the Bakersfield Water Company, and the North Sacramento Light and Water Company. A temporary permit was granted to the City of Pasadena to continue to dispose of sludge from its septic tank into the San Gabriel Wash.

After a hearing the Board granted a temporary permit to the City of Stockton to discharge sewage into the San Joaquin River after screening through half-inch mesh screen and chlorinating the effluent.

A committee of three was appointed to view the seven moving pictures on baby hygiene prepared under the direction of the California Collegiate Alumnae and was given power to endorse them in the name of the Board.

Licenses were granted to three cold storage warehouses.

One hundred and forty citations had been sent out for violation of the pure food and drug laws. Hearings were held in all cases on which the accused appeared in person or through a representative. Many of the cases were referred to district attorneys for prosecution.

WILBUR A. SAWYER, Secretary.

DEPARTMENT OF BACTERIOLOGY AND PATHOLOGY.

Edited by BENJAMIN JABLONS, M. D.

[This department has as its chief object the dissemination of the special knowledge that is being developed in the scientific laboratories of the world, and which are of practical interest to the medical practitioner. Abstracts of general articles will be published from time to time as well as preliminary reports of subjects that are of universal interest.]

JOURNAL OF EXPERIMENTAL MEDICINE. MARCH, 1917.

Paul A. Lewis has carried out a most interesting series of experiments relative to the inhibitory effect of a certain group of dyes on the growth of tubercle bacillus, as compared with its effect on Bacillus typhosus. His results are very interesting in view of the more recent experiments relative to the disinfectant action of the aniline dyes. While most chemical compounds have inhibitory or even bactericidal effect on various types of micro-organisms, they have not manifested the same effect in vivo, with the exception of Optochin (Ethyl hydrocuprein), which has a decided effect on pneumococcus septicemias in animals. He has found in a study of 264 different dyes which fall into several groups that those belonging to the azo-dye group possess the power of inhibiting the growth of tubercle bacilli up to very high dilutions. Of these groups, Aurantia (Grübler) and Heliotrop will inhibit the growth of the tubercle bacillus up to a dilution of 1-4,000,000 while the typhoid bacillus is inhibited up to a dilution of 1-1,000 for aurantia and 1-8,000 for heliotrop. Further investigations along this line might be of great value in experiments carried out with the object of disinfecting or limiting the growth of the tubercle bacillus in processes associated with its active proliferation.

JOURNAL OF MEDICAL RESEARCH. SEPTEMBER, 1916.

A. A. Krause has studied the factors underlying the presence and significance of the Von Pirquet test and has come to the conclusion that,

1. Cutaneous hypersensitiveness to tuberculoprotein is inaugurated by the establishment of infection and the development of the initial focus.
2. It increases with progressive disease.
3. It varies directly with the extent and intensity of the disease.
4. It diminishes with the healing of the disease.
5. It is probably never entirely lost (except in the presence of intercurrent disease, pregnancy, etc.)

6. It is increased by re-infection.

7. It is diminished or completely wiped out during the period of the general tuberculin reaction.

The possibility of tissue hypersensitiveness being a function of immunity is not to be discarded.

The general impression obtained from the extensive experiments carried out on an unusually large number of guinea pigs with a virulent and an avirulent strain of tubercle bacillus is that the hypersensitiveness of the skin is of a low grade following infection and that the hypersensitiveness rapidly rises if there is a fresh infection. Should the disease subside and the individual recover, the hypersensitiveness would fall gradually to a lower level. Should the disease remain active the high level of hypersensitiveness would persist and last until the body is overwhelmed and its resistance broken down completely by disease when hypersensitiveness disappears.

Anaphylaxis and Tuberculosis. Krause has been able to determine the following facts in an experimental study of the effect of anaphylaxis on the resistance to infection by the tubercle bacillus and to the extension of tuberculous disease:

1. Anaphylactic shock in guinea pigs experienced a short time before infection with tubercle bacilli does not reduce their resistance to such an extent that the virulence of the organism is in any way markedly increased, although the extent of the disease seemed slightly increased.

2. After tuberculosis is once established a single attack of anaphylaxis does not bring about conditions that favor the extension of the disease.

3. Anaphylactic shock suffered before the inoculation of a non-pathogenic acid fast organism does not lay open the body to progressive invasion by this germ.

4. Efforts to enhance the virulence of a germ by previous sensitization of from five to fifteen days proved fruitless, thereby failing to confirm previous experiments of Thiele and Embleton.

5. Inoculation experiments proved that the tubercle bacillus could preserve its viability and original virulence after being kept in a dried state for as long a time as fifteen to seventeen months.

Immunity to Tuberculosis. The General Tuberculin Reaction. A. A. Krause considers the general reaction occurring after the administration of tuberculin as due to a change in the circulatory factors which permit of the sudden entrance of tissue products into the general circulation. He found that the tissue products of tuberculous foci were not more toxic than normal tissue products, that filtration through Berkefeld filters, paper or cotton would hold back these poisonous tissue products and that drying the filter residue would render these substances non-toxic. He concludes that an extract of an animal's own normal tissue is toxic if introduced rapidly into its circulation and that the products of tuberculous foci are primarily toxic. The general reaction according to Krause is due to the rapid absorption of the toxic products of the tuberculous focus brought about by the changed circulatory factors following the focal reaction around the tuberculous focus.

JOURNAL OF THE AMERICAN MEDICAL ASSOCIATION, MARCH 3 and 10, 1917.

Natural and Acquired Resistance to Tuberculosis and Bearing on Preventive Measures.

Theobold Smith discusses the parasitic cycle of the tubercle bacillus from the point of view of adaptation of the tubercle bacillus to the changed environment it is confronted with from the time it gains entrance to the human host to the time that it repeats its cycle in another human host. He considers that the fact has been lost sight of that the bacillus must change its character to meet the different conditions that it is exposed to. These vary from the deleterious effects of an extrahuman existence to that of life within the human where it is subject to tissue and blood serum immunity. Baumgarten, Weigert and Von Pirquet have always favored the view that the tubercle bacilli always produced lesions at the portal of entry. On the basis of numerous observations on humans and cattle, Smith has come to the conclusion that the tubercle bacilli have a predilection for lymph node tissue, but are not retained there. They gain entrance into the lung tissue where, after multiplication and destruction of the lung tissue they pass out to repeat their cycle. The three types of bacilli are chiefly, the human, bovine and avian types. He considers that these are derived from a common ancestor, but the transformation that has taken place has sufficiently modified these strains so that transmutation from one type to another has never been effected. The Bovine Tubercle Bacillus type of disease affects principally the lymph nodes of the neck and the mesentery, and in general is to be considered a food disease capable of being stamped out by adequate hygienic and relatively simple measures.

The other form of the disease most prevalent in the human race is that type known as Phthisis, in which the infecting agent enters and leaves by the same route. The two aberrations are the primary lymph node disease and the hemotogenous infections of other organs. It often happens that the primary lymph node disease is not overstepped and that by hygienic measures the primary infection may be controlled. It is wise to consider the generalized infection as the disease, in order to be able to see the comparison between this and other acute infectious disease.

The type of the disease manifested is affected by dosage of the virus, variations in virulence, racial character of the host, rib pressure, lung ventilation, occupation, and especially by intercurrent diseases such as measles, whooping cough and pneumonia. Severe physical exertion, such as labor with its attendant exertion, are important factors in the production of disseminated tuberculous foci.

The relation of the tubercle bacillus to the tissues of the host seem to be confined chiefly to the endothelial cells, for it is here that the bacilli seem to multiply. It is from these cells that they creep from place to place by way of the blood or the lymph stream. Suppression or destruction of the bacillus takes place in any one of these areas. The caseation that takes place is due to the unsaturated fatty acid soaps of the bacillus which act antitryptically and inhibit the action of the leucocytic ferments. The exudative or proliferated tendency of the tubercle bacilli depends entirely on the virulence, number and their secretory and excretory activity. In the tubercle which is the most frequent product of reaction associated with the bacillus the endothelial like cells seem chiefly involved while the polynuclear leucocytes do not appear.

Agglutinins and precipitins are supposed to be constant in spontaneous tuberculosis but do appear in the experimental disease. Opsonins are either slightly reduced or fluctuating. Complement fixing bodies appear after the injection of living and dead bacilli. They are not present in the blood of non-tubercular individuals but are encountered in from 6 to 8% of tuberculous individuals. Polymorphonuclear leucocytes appear generally with lesions associated with the exterior so that it is difficult to discard the possibility of secondary infection with other organisms.

DEPARTMENT OF PHARMACY AND CHEMISTRY.

Edited by FRED I. LACKENBACH.

(Devoted to the advancement of Pharmacy and its allied branches; to the work of the Council on Pharmacy and Chemistry of the American Medical Association, and to matters of interest bearing upon the therapeutic agents offered to the medical profession. The editor will gladly supply available information on matters coming within the scope of this Department.)

Tabellae Dulces Aristochin (Western), 1 gr.—Each tablet contains aristochin 1 grain with cocoa, sugar and saccharine as vehicles.

Tabellae Dulces Heroin 1/100 gr.—Each tablet contains heroin 1/100 gr. with cocoa, sugar and saccharine as vehicles.

Tabellae Dulces Novaspirin (Western), ¼ gr.—Each tablet contains novaspirin ¼ grain with sugar, starch, liquid petrolatum, saccharine, curcuma and oil of lemon as vehicles.

Tabellae Dulces Tannalbin (Western), 1 gr.—Each tablet contains tannalbin 1 grain with cocoa, sugar and saccharine as vehicles.

Tabellae Dulces Terpin Hydrate with Heroin (Western), 1/100 gr.—Each tablet contains terpin hydrate ½ grain, and heroin 1/100 grain, with cocoa, sugar and saccharine as vehicles. Western Chemical Company, Hutchinson, Minn. Accepted for the Appendix to New and Nonofficial Remedies (Jour. A. M. A., Feb. 10, 1917, p. 461).

ITEMS OF INTEREST.

Novocain Decision.—The United States Circuit Court of Appeals for the Second Circuit in an unanimous opinion has confirmed the decision of Judge Grubb of the United States District Court, holding that Novocain and such other preparations as Anesthesin, Orthoform, Holocain, etc., do not come under the Harrison Anti-Narcotic Act, and therefore physicians, dentists, druggists and wholesalers prescribing, using or selling them can do so without registering or using the Harrison narcotic blank in ordering them. This would seem to sustain the contention that Novocain is not a habit-forming anesthetic and in no way related to Cocain or the other products included under the Harrison Act.

Emetine in Dysentery and Pyorrhea.—Emetine is accepted to-day as an almost ideal specific against amebic dysentery. Experience indicates that by its use abscess of the liver can be prevented and even cured. When a differential diagnosis between amebic and bacillary dysentery cannot be made, emetine may be of diagnostic value because improvement follows from its use if the case be amebic. In neglected cases and some other forms of the disease the emetine treatment may fail of complete success. As a direct cure for pyorrhea emetine seems to have failed, not because it does not act on the ameba which are found in the pyorrheal pockets but because pyorrhea is not caused by ameba (Jour. A. M. A., Feb. 3, 1917, p. 374).

The Phenolsulphonephtalein Test.—It has been assumed that excretion of less than 60 to 80 per cent. of phenolsulphonephtalein in two hours is an indication of renal insufficiency. It has been found, however, that in certain experimental conditions, phenolsulphonephthalein may be destroyed in the body and therefore not appear in the urine although the kidneys function normally. If this condition is found to occur in clinical cases the interpretation of the tests may have to be limited to this: an excretion of 60 to 80 per cent., i. e., a positive result, within two hours after the injection of the phenolsulphonephthalein is evidence of satisfactory renal activity (Jour. A. M. A., Feb. 3, 1917, p. 379).

Glycerophosphate Comp. Ampules, 1 c. c., Squibb.—The Council on Pharmacy and Chemistry refused recognition to Glycerophosphate Comp. Ampules, 1 c. c., Squibb, each said to contain sodium glycerophosphate 0.1 gm., strychnin cacodylate 0.0005 gm., and iron cacodylate 0.01 gm., because the name did not indicate the potent ingredients and because the administration of a mixture of sodium glycerophosphate, strychnin cacodylate and iron cacodylate is irrational. In recognition of the Council's conclusion, Squibb and Sons state that the sale of the ampules has been discontinued. This co-operation in the work of the Council on Pharmacy and Chemistry is gratifying (Jour. A. M. A., Feb. 3, 1917, p. 388).

Fate of Trypsin in the Stomach.—Judging by recent experiments, it appears that the proteolytic enzyme of the pancreas isolated as trypsin is capable of withstanding a rather long digestion in presence of hydrochloric acid and pepsin, provided that sufficient protein is present to combine with all or a part of the acid and so bring the free acid down to a certain level. From the observations it seems possible that some tryptic digestion may occur within the stomach when the free acid is low from combination with protein. The results do not, however, even remotely suggest that the administration of a few grains of the various commercial products claimed to contain trypsin or pancreatin would have the slightest therapeutic significance (Jour. A. M. A., Feb. 17, 1917, p. 554).

ORGANIZATION OF THE MEDICAL RESERVE CORPS, U. S. ARMY, STATE OF CALIFORNIA.

It has been suggested by the Association of Military Surgeons that the Medical Reserve Corps in California organize a state association. Its meeting to take place at the same time as the California State Medical Society, at Coronado, California, April 17th, to 19th, 1917. Its purposes will be to foster patriotism and preparedness for war service among medical men, to strive for the best interest of the corps, to elect delegates to the national association which will meet annually at the time and place of meeting of the American Medical Association. Notice of exact date and time of meeting will be mailed to individual members of the Corps.

W. S. JOHNSON, M. D., Chairman,
Section on Medical Preparedness San Francisco County Medical Society.

EXAMINATION BY NATIONAL BOARD OF EXAMINERS.

The second examination to be given by the National Board of Medical Examiners will be held in Washington, D. C., June 13, 1917. The examination will last about one week.

The following states will recognize the certificate of the National Board: Colorado, Delaware, Idaho, Iowa, Kentucky, Maryland, North Carolina, New Hampshire, North Dakota and Pennsylvania. Favorable legislation is now pending in twelve of the remaining states.

A successful applicant may enter the Reserve Corps of either the Army or Navy without further professional examination, if their examination papers are satisfactory to a Board of Examiners of these services.

The certificate of the National Board will be accepted as qualification for admittance into the Graduate School of the University of Minnesota, including the Mayo Foundation.

Application blanks and further information may be obtained from the Secretary, Dr. J. S. Rodman, 2106 Walnut street, Philadelphia.

ARMY MEDICAL CORPS EXAMINATIONS.

The Surgeon General of the Army announces that preliminary examinations for appointment of First Lieutenants in the Army Medical Corps will be held at convenient points the first Monday in each month. Full information concerning these examinations can be procured upon application to the "Surgeon General, U. S. Army, Washington, D. C."

The essential requirements to secure an invitation are that the applicant shall be a citizen of the United States, shall be between 22 and 32 years of age at the time of commission at the close of the Army Medical School, a graduate of a medical school legally authorized to confer the degree of Doctor of Medicine, shall be of good moral character and habits, and shall have had at least one year's hospital training as intern after graduation.

Graduate physicians who are serving their internship and who meet the other requirements can be examined for appointment with the understanding that they will complete the required post-graduate hospital internship before coming to the Army Medical School.

Those who qualify at their preliminary examination and complete their hospital internship by July 1st will be ordered to the Army Medical School for the special session of the school commencing July 9th. The regular session of the school will open on October 1.

In order to perfect all arrangements for the examination, applications should be completed at the earliest practicable date.

There are at present 230 vacancies in the Army Medical Corps.

After July 1 there will be 222 additional vacancies.

March 3, 1917.

The Editor,
California State Journal of Medicine,
San Francisco, California.

Sir: Should the country ever be engaged in war, the Medical Department of the Army in calling Reserve officers to the colors, wishes to cause as little hardship and sacrifice to the Reserve medical officers as may be consistent with the needs of the country. With this end in view the Department desires that you bring to the attention of the profession at large the necessity of the city, county, and state medical societies organizing for the purpose of taking care of the practices of the officers of the Reserve who respond to a call for service. In England this plan has proven of great benefit. The idea of the Department is that the profession should organize upon a similar basis.

For example, should Dr. Jones be called to the colors, the local medical society, through its members, would take care of his practice during his absence. Upon relief from active duty his practice would be returned to him intact. Such a plan will cause no unnecessary hardship upon the officer responding to a call for service; while the absence of such plan would penalize the officer who gives his service to the country in a crisis. The Department appeals to the patriotism of the profession, to protect the interest of those of the profession who may be called to duty in war.

For the Surgeon General,
Sincerely,
ROBT. E. NOBLE,
Major, Medical Corps, U. S. Army.

THE PHARMACISTS AND PREPAREDNESS.

A course has been organized by the College of Pharmacy, University of California, to prepare the students to qualify as non-commissioned officers in the Sanitary Troops in case of war. The course consists of instruction in first aid, by Dr. Richard J. Dowdall, and in regular drills at the Presidio under the instruction of non-commissioned officers of the Sanitary Troops. Eighty-seven students at the College are attending the first aid course, and fifty-two are enrolled in the drill course.

FLEECING THE DOCTORS.

The San Francisco Police Department has called our attention to a criminal who is "working" the doctors and druggists by means of the following letter. The description of the man is furnished by the police. Notify them should he come your way.

Woodland Ranch.
Woodland, Cal., March 6, 1917.

Dear Sir:

This will introduce to you Mr. August D. Cavernora, who has been in my employ as a foreman for the last eight or ten years. Since that time he has been ailing for about nine or ten months and his case is constantly getting worse.

Now, doctor, I have been recommended to you by Dr. E. Gray and also Dr. Stratton, both of Marysville, California. Mr. Cavernora has been sent to you on their request. Would like to state that Mr. Cavernora has a wife and three children and is not abundantly supplied with this world's goods, and for that reason wish you would be as reasonable as possible. He has also got two or three more recommendations, but I advised him to go to you first. Mr. Cavernora is coming to you for examination and if you think you can cure him within a reasonable length of time I would suggest that you would keep him in San Francisco close by you.

Mr. Cavernora has been to several different doctors but from not one of them did he derive any benefit. I also would like to state that if Mr. Cavernora's funds should run out I will credit his account to the amount of $250.

Kindly notify me before his funds have run out. Also kindly send me a letter as to the result of your examination, stating when you think he will be able to resume work.

Wishing you success, I am
Yours very truly,
WILLIAM J. H. McLANE.

Description of Cavernora:

Age 30; 5 feet 6; 150; looks like an Italian or foreigner; dark sack suit; dark gray overcoat.

NEW MEMBERS.

Dolan, Paul E., Livermore.
Glenn, Robt. A., Oakland.
Martin, L. A., Oakland.
Wythe, Margaret, Oakland.
Ellis, Walter L., Calexico.
Richter, Henry Carl, Calexico.
Brown, F. Earl, Fellows.
Goodall, Oswald Patrick, Bakersfield.
Paulson, J. E., San Quentin.
Klick, John J., Sutter Creek.
Holliger, Charles D., Stockton.
Conzelmann, Fred J., Stockton.
Coleman, Barney E., Mokelumne Hill.
Brown, T. H., Orland.
Rose, L. M., Santa Clara.
Stadtherr, Edw. F., San Jose.
Fraser, Morton Wm., Lemon Cove.

DEATHS.

McFarland, W. L., Benicia.
Healy, John Hopkinson, San Francisco.
Thompson, George Howard, Seattle, Wash.
Hume, Wm. Robert, Oakland.